The Horse and his Diseases.

Dr. B. J. Kendall & Co.
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THE ABOVE IS A GOOD REPRESENTATION OF THE NEW LABORATORY AND MANUFACTORY OF B. J KENDALL & CO., ENOSBURGH FALLS, VT., PROPRIETORS OF THE CELEBRATED KENDALL'S SPAVIN CURE.

A TREATISE

ON

THE HORSE

AND

HIS DISEASES.

ILLUSTRATED.

CONTAINING AN "INDEX OF DISEASES," WHICH GIVES THE SYMPTOMS, CAUSE, AND THE BEST TREATMENT OF EACH; A TABLE GIVING ALL THE PRINCIPAL DRUGS USED FOR THE HORSE, WITH THE ORDINARY DOSE, EFFECTS, AND ANTIDOTE WHEN A POISON; A TABLE WITH AN ENGRAVING OF THE HORSE'S TEETH AT DIFFERENT AGES, WITH RULES FOR TELLING THE AGE OF THE HORSE; A VALUABLE COLLECTION OF RECEIPTS, AND MUCH OTHER VALUABLE INFORMATION.

BY

DR. B. J. KENDALL & CO.,

ENOSBURGH FALLS, VT.

REVISED EDITION.

CHICAGO:

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1884.

PREFACE.

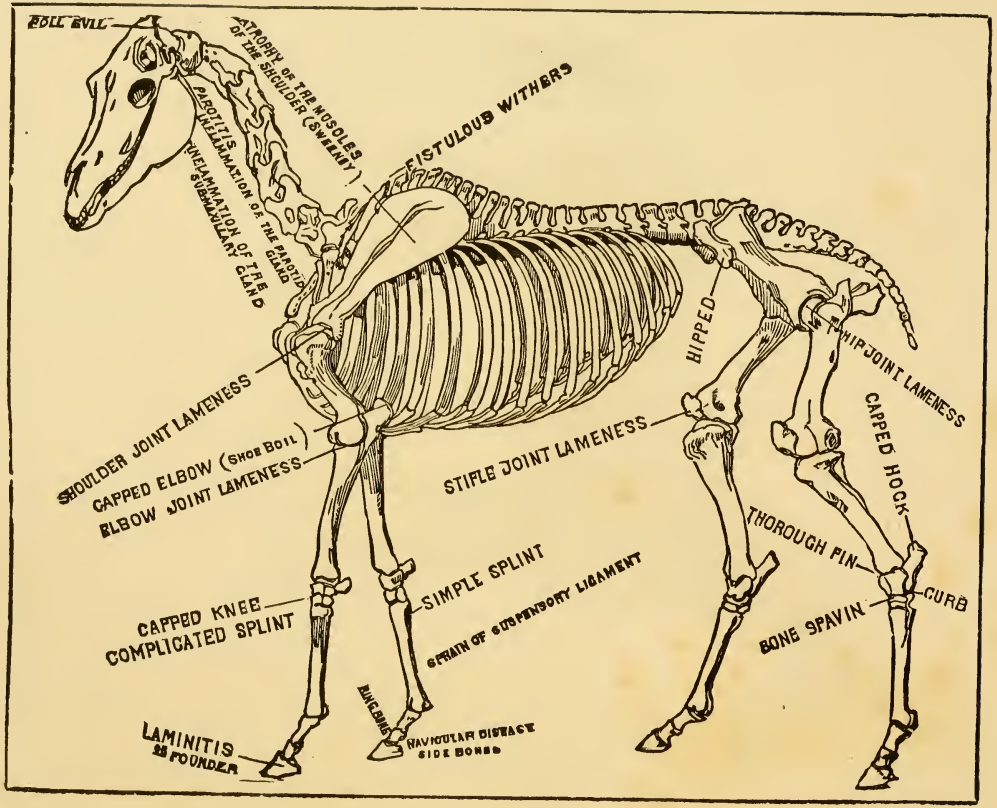
It has been one of our greatest aims, in preparing matter for this book, to make it as plain as possible for non-professional readers, and to give them information which is of the greatest importance to horsemen, and yet avoid all technical terms as much as possible, and also condense the book as much as we can without leaving out the real essential information in treating each subject.

It contains an *Index of Diseases*, giving a description of each, with causes, symptoms and treatment. Also, a large collection of *Valuable Receipts*, of which many single receipts are worth, to every horse owner, several times the price of the book.

The treatment given for each disease can be relied on as being the best. To aid non-professional horse owners, in deciding what the disease may be, we give engravings which show the positions taken in the different stages of diseases, and which are of great value in coming to a positive conclusion as to the nature of the disease.

EXPLANATION.

1. Forehead.
2. Jaw.
3. Throat.
4. Breast.
5. Shoulder.
6. Arm.
7. Large Pastern.
8. Small Pastern.
9. Withers.
10. Back.
11. Loin.
12. Hip.
13. Stifle.
14. Thigh.
15. Hamstring.
16. Point of the Hock.
17. Hock.
18. Croup or Rump.
19. Dock.
20. Cannon-Bones.


POLL EVIL
ATROPHY OF THE MUSCLES OF THE SHOULDER (SWEENY)
PAROTITIS, INFLAMMATION OF THE SUBMAXILLARY GLAND
INFLAMMATION OF THE PAROTID GLAND
FISTULOUS WITHERS
SHOULDER JOINT LAMENESS
CAPPED ELBOW (SHOE BOIL)
ELBOW JOINT LAMENESS
CAPPED KNEE
COMPLICATED SPLINT
SIMPLE SPLINT
STRAIN OF SUSPENSORY LIGAMENT
RINGBONE
LAMINITIS OR FOUNDER
NAVICULAR DISEASE SIDE BONES
STIFLE JOINT LAMENESS
HIPPED
WHIP JOINT LAMENESS
CAPPED HOCK
THOROUGH PIN
CURB
BONE SPAVIN

INDEX OF DISEASES.

ABSCESS OF THE BRAIN is caused by some injury to the head.

Symptoms.—Refuses food ; acts dull ; a slight oozing from a trivial injury upon the skull ; the animal is prostrated, and while lying down continues to knock his head against the ground violently until death ensues.

Treatment.—No treatment is of any service.

ABDOMINAL DROPSY is usually the result of chronic inflammation of the bowels.

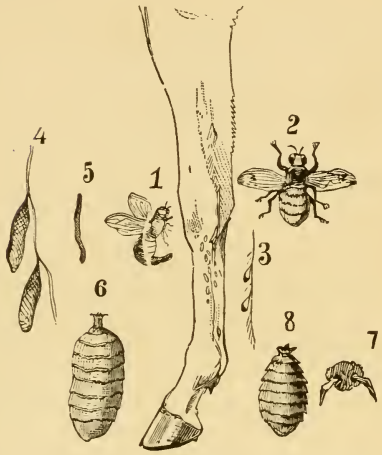
Symptoms.—Head hanging ; mouth dry ; membranes look pale ; pulse hard. If the horse turns about suddenly the act will elicit a grunt. Pressure on the abdomen will cause him to groan. A lack of spirits ; lies down constantly if left to himself ; is restless, thirsty, no appetite ; is weak, abdomen enlarged yet the horse quite thin in flesh, hide-bound and constipated. One of the legs and the sheath are sometimes swelled.

Treatment.—Begin the treatment as soon as you can decide as to the nature of the disease. Give, night and morning, 20 grs. extract of belladonna, 10 grs. sulphate of quinine, 35 grs. iodide of iron, ½ gr. strychnia. Mix, and give at each dose. Mix 5 ozs. tincture of iodine and 2 ozs. croton oil, and apply a little to a portion of the abdomen by rubbing down to the skin and shifting to a different location when the skin becomes sore. Some cases are incurable.

BOTS.—The stomach seems to be the natural nursery for the protection and the propagation of the stomach bot. When the eggs have remained in the stomach for a year they become a perfect chrysalis (that is, the form of a butterfly before it reaches the winged state), and then they release their hold of the stomach and are expelled with the dung. It will be provided with wings in a short time, and will fly about commencing the propagation of its species which passes through the same period of incubation.

They are of two kinds, stomach and fundament bots. The stomach bots are the result of turning horses into pasture in the summer months, and are produced from the eggs laid on the fore legs of the horse by the bot fly.

Symptoms are an unthrifty coat, and loss of flesh after running out to pasture.



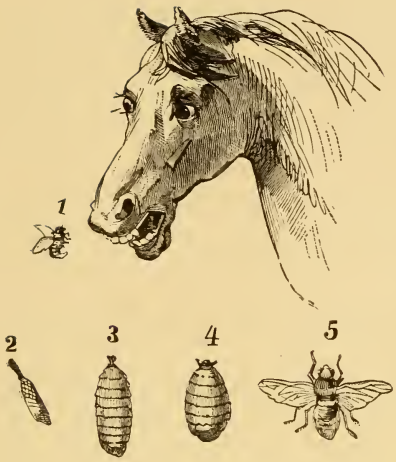
No. 1. The female fly about to deposit an egg.
" 2. The male fly.
" 3. The egg its natural size.
" 4. The egg magnified.
" 5. The newly hatched bot.
" 6. The bot fully grown.
" 7. The head of a bot magnified.
" 8. The chrysalis.

All horses which run out to grass are quite sure to have bots in their stomachs, and as there is so much misconception about bots and their destructiveness to horses we copy the result of a series of experiments with bots three-fourths grown.

When immersed in rum they live twenty-five hours; decoction of tobacco, eleven hours; strong oil of vitriol, two hours eighteen minutes; essential oil of mint, two hours five minutes. Were immersed without apparent injury, in spirits of camphor, ten hours; fish oil, forty-nine hours; tincture aloes, ten hours; in brine, ten hours; solution indigo, 10 hours. A number of small bots, with one that was full grown, were immersed in a strong solution of corrosive sublimate, one of the most powerful poisons; the small ones died in one hour, but the full grown one was taken out of the solution, six hours after its immersion, apparently unhurt.

It will be seen by the above experiments, that no medicine can be given which will affect the bot, that will not destroy the coating of the stomach, and injure or kill the horse. No veterinary surgeon can distinguish the symptoms of bots from those of colic. In fact, there is but little doubt that ninety-nine out of every one hundred cases of belly ache are no more nor less than colic and not bots, and should be treated as we direct in the treatment of colic.

Treatment.—The general condition of the horse should be improved, so that the debilitating effects of the bots may not interfere with the general health of the horse. It is generally considered impossible



No. 1. The female about to deposit an egg.
" 2. The egg magnified.
" 3. The bot.
" 4. The chrysalis.
" 5. The male fly.

to expel or destroy the bots. Give the following tonic medicines to improve the general condition: pulv. gentian ¼ lb., pulv. copperas ¼ lb., pulv. fenugreek ½ lb., pulv. elecampane ¼ lb. Mix well, and give a large tablespoonful once a day.

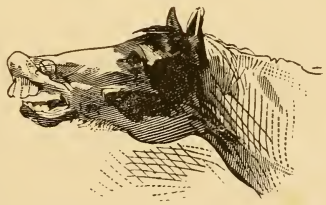
Fundament Bot. — Like the stomach bot, this is also the result of running out to grass. Instead of the eggs being deposited on the legs they are deposited on the lips of the horse. They are found in the rectum, and often seen about the anus and under the tail.

Treatment.—Injections of raw linseed oil, or of tobacco smoke.

BOWELS, INFLAMMATION OF.—The symptoms are very severe pain in the belly, varying from those of colic in being a continuous pain (while in colic there are intervals of rest from pain), rolling, pawing, sweating, rapid breathing with an inclination to shift about, with great fever and excitement. The disease comes on more gradually than colic (which see), legs and ears cold, belly tender and painful on pressure. (See cut for position of nose, etc.)

Causes. — Constipation, exposure to cold, drinking cold water in large quantities when hot, hard driving, diarrhœa, and as a sequel to colic.

The above named causes, when occurring in a horse predisposed to the disease, are quite liable to bring it on.



A GENERAL SYMPTOM OF ABDOMINAL IRRITATION.

Treatment.—If the cause is constipation, give a quart of raw linseed oil, and, if necessary, add from four to six drops croton oil. If the cause is over-purging, give an ounce and a half of tincture of opium in a half pint of water. If

the cause should be other than costiveness or diarrhœa, give thirty drops of the tincture of aconite root, and repeat it in two hours. Apply blankets, wrung out of hot water, to the belly, and renew them every fifteen minutes. Give injections of warm (not hot) water, castile soap, and a handful of table salt every half hour until the bowels move some. There is a diversity of opinion in regard to bleeding. It is my opinion that it is of doubtful utility in this disease.

BRONCHITIS.—This disease consists in an inflammation of the air passages of the lungs. It is a very common disease among horses, and is sometimes confounded with inflammation of the lungs (or lung fever), distempers and colds.

Symptoms.—Begins with a chill, fever, harsh cough, labored breathing, mouth hot and dry, with loss of appetite, and in one or two days a discharge from the nostrils will be observed.

Treatment.—Give the horse a good, comfortable place (not too close nor the reverse). Give fifteen to twenty drops tincture of aconite root, and repeat every four hours until six doses have been given, which will probably relieve the fever. Let the horse have plenty of cold water to drink. We would discourage the idea of bleeding, as it would be more likely to do harm than good.

After the fever has subsided (which will probably be about the second day), give a few powders of the following: Mix pulv. licorice root, pulv. fenugreek and pulv. gentian, two ounces of each, and divide into six powders and give in feed two or three times a day.

CHRONIC BRONCHITIS is the result of bad treatment of acute bronchitis, and when the attack has been prolonged for some time.

Symptoms.—A cough which seems to be confirmed, with discharge from the nostrils, and cough worse after drinking and in the morning.

Treatment.—Take of pulv. gentian and pulv. sulphate of iron, eight ounces each. Mix thoroughly and divide into thirty-five powders and feed twice a day until all has been given; then make an ointment of red iodide of mercury, one drachm, lard, one ounce, thoroughly mixed together. Apply the above named ointment down the course of the windpipe, and the next day apply sweet oil or lard to keep the skin from cracking. Repeat the application of the ointment in one week.

BURNS AND SCALDS.—When the burn is so deep as to destroy the skin and superficial tissues, we would recommend raw linseed oil, applied with bandages, to protect the parts from the air, and allowed to remain for several days.

But when the skin is not destroyed we have found that "Kendall's Spavin Cure" is an excellent remedy for such burns on man; so we feel certain it will work equally well on any animal.

CALLUS.—A callus is a thickening of the cuticle or of any soft part, caused by pressure or friction, or it may be the result of some injury which after remaining sore for some time finally heals, leaving a thick, hard and enlarged surface which we term callus, and which not only injures the sale of the horse but is also a constant "eye-sore" to the owner.

Treatment.—We can only recommend one course, as we have had no experience with any other which proved successful, and that is to apply Kendall's Spavin Cure two or three times a day, for several weeks, as directed for spavin. These can not generally be removed very quickly, yet if the above plan is followed out it is sure to be effectual.

CAPPED ELBOW.—(Shoe Boil.) This enlargement on the point of the elbow is on the side of the chest just behind the shoulder. It is a tumor (or sometimes a simple abscess) caused by direct pressure against the calk or heel of the shoe; particularly when the latter is allowed to protrude too far backward. Pads are made by harness makers which are quite useful in protecting the parts while the horse is lying.

Treatment.—If the tumor is soft and shows signs of containing pus, it would be well to open it and allow the matter to escape. Some recommend that the tumor be dissected out with a knife and then treated as any simple wound by keeping clean until it heals. "Kendall's Spavin Cure" has been used with very gratifying results for Shoe Boil. It should be applied twice a day for some time, the same as when it is desired to remove any enlargement. Some get an idea that if a bottle of "Kendall's Spavin Cure" is applied, it will do as much good to apply the whole in two to four days as to be as many weeks in using it, but we would like to have it remembered that it takes time to remove any enlargement, and especially if it has existed for any length of time, therefore we say it is not so much in the quantity used in a given time as in the length of time it is used. We know of no remedy that is so certain to remove Shoe Boil, when properly used, as "Kendall's Spavin Cure."

CAPPED HOCK.—This is a soft swelling on the point of the hock joint. It is caused by kicking in the harness or stable, or by being kicked by another horse, and rarely causes any lameness.

Treatment.—Kendall's Spavin Cure used as for capped elbow is a safe and sure remedy.

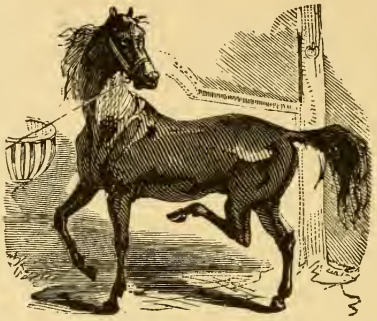
CAPPED KNEE.—Caused by some injury to the knee.

Symptoms.—A soft tumor in front of the knee.

Treatment.—If left alone it would probably burst and leave a permanent blemish. If the tumor is hot, bathe first with cold water to reduce the heat, or bind on cloths wet with cold water and change often, then apply Kendall's Spavin Cure as directed for capped elbow.

CAUTERY.—(*Firing.*) This cruel and inhuman practice is one which has been practiced in the past, and perhaps is to a slight degree now, but we sincerely believe it to be one which ought to be forbidden by all humane societies, as the cases which are benefited are *very* few, if any, that could not be benefited by milder and more humane means. (See Firing Horses.)

COLIC.—Colic is a very common as well as a very dangerous disease. There are two forms: Spasmodic and Flatulent Colic. The former is of a spasmodic nature, and will, in severe cases, run into inflammation of the bowels and cause speedy death, if not relieved.



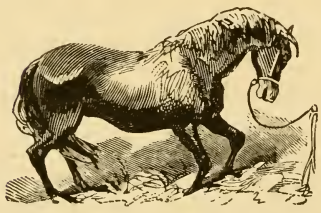
FIRST STAGE OF SPASMODIC COLIC.

Causes of Spasmodic Colic are drinking cold water when in a heated condition, costiveness, unwholesome food, undue quantity of food, etc.

Symptoms.—The horse is suddenly attacked with pain, and shows evidence of great distress, shifting his position almost constantly, and manifesting a desire to lie down. But in a few minutes these symptoms disappear, and the horse is easy for a short time, when they return with increasing severity until the horse can not be kept upon his feet.

A cold sweat generally breaks out over the body. The legs and ears remain at about the natural temperature.

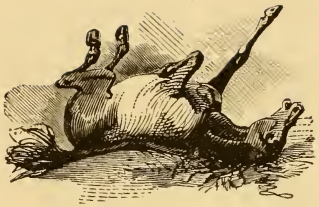
He looks around to his flanks, mostly at the right side, as if pointing out the seat of the disease, scrapes the ground with his forward foot, and will almost strike his belly with his hind foot.



SECOND STAGE OF SPASMODIC COLIC.

The horse heaves at the flanks; he kicks and rolls, and seems much excited, and sometimes acts as though he wanted to make water, which he can not do, on account of the urethra being spasmodically contracted. This symptom need not be treated (as it frequently is), for as soon as the horse is relieved of the colic, he will pass water freely. Therefore follow the treatment we give on next page, and relieve the colic as soon as possible.

As the disease advances the horse will frequently throw himself down with force, look anxiously at the sides and sometimes snap with his teeth at his sides, and strike upwards with his hind feet as they do many times with inflammation of the bowels.



THIRD STAGE OF SPASMODIC COLIC.

Symptoms of

Colic.	*Inflammation of Bowels.*
Attacked suddenly.	Symptoms come on gradually.
Intervals of rest.	In constant pain.
Pulse not much altered in the early stage of the disease.	Pulse small and much quickened, and scarcely to be felt many times.
Rubbing belly gives relief.	Belly quite tender and sore to the touch.
Ears and legs of natural temperature.	Ears and legs cold.
Motion gives relief.	Motion increases pain.
Strength scarcely affected.	Strength rapidly failing.

Treatment. Relieve the pain by giving one ounce sulphuric ether, two ounces of tincture of opium (laudanum) and a pint of raw linseed oil, and, if not relieved in an hour, repeat the dose. If there is not relief in a reasonable length of time after the second dose is given, some recommend bleeding from six to ten quarts from the neck vein, but we think it is *rarely* necessary to do this. Occasionally walk the horse about to excite the bowels to action.

The following mixture is said to be very good:

Take aromatic spirits of ammonia 1 pint, sulphuric ether 1 pint, sweet spirits of nitre 1½ pints, gum opium (made fine) 4 ounces, camphor gum 4 ounces, assafœtida 4 ounces. Mix all together, and shake frequently for twelve or fifteen days; then filter or strain through flannel, and it will be ready for use. Dose—one tablespoonful in a little water, repeated in thirty minutes. A larger dose may be given sometimes in very severe cases.

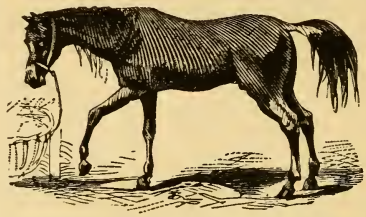
Another excellent remedy, which is always at hand, is one heaping tablespoonful of saleratus mixed with one pint of milk, and given at one dose.

Always begin the treatment as soon as possible.

Flatulent Colic, Windy Colic, etc.—The horse is uneasy, hangs the head, and exhibits a few of the general symptoms of spasmodic colic before there is any enlargement of the belly; but more particularly after, for as

soon as the belly swells the pawing commences, although it is not so violent as in spasmodic colic.

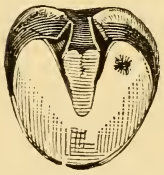
There is but little rolling or kicking at the belly as in spasmodic colic, and the horse is not inclined to move about much. After from one to four days the belly becomes much increased in size (if the disease is not checked), and the animal becomes restless.



FIRST STAGES OF FLATULENT COLIC.

Treatment.—Do not bleed for flatulent colic. Try an injection first, and if gas or wind come away with it, the patient will most likely recover soon; but if no benefit is derived from the injection, give the remedies as recommended for spasmodic colic. Let the horse be led around quietly until the medicine has had time to take effect, so as to prevent his falling or rolling, as it might cause rupture of the diaphragm.

CORNS appear in the angle of the hoof near the heel, and are generally caused by the shoes being worn too long, causing the shell of the hoof to grow over the shoe, which allows the weight to press upon the sole; or the shoe gets moved from its proper position, or perhaps never was placed there. As a general rule, the production of corns may be laid to the shoer.



SITUATION OF A CORN.

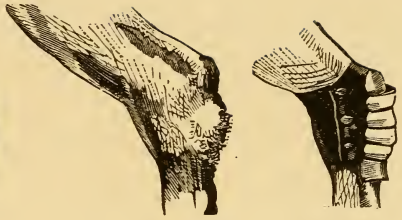
Upon cutting away the horn there will be found a red spot; but if very bad, the color will be a dark purple, and it will be deeper seated.

Treatment.—Dress down the bruised part until quite thin, and apply Kendall's Spavin Cure quite freely, and then put on the shoe, so fitted that there will be no pressure on the part. Apply the Spavin Cure for several days. If the above treatment fails (which it probably will not), then dress down the bruised part, thin as before, and apply Kendall's Blister (which will be sent by mail on receipt of $1.00), thoroughly rubbed in, and continue to apply Kendall's Spavin Cure, as recommended in treatment of bone spavin.

CURB.—This is one of the many diseases of the hock-joint, and consists of an enlargement or gradual bulging out at the posterior part of the hock. (See engraving.)

Cause.—Curb is generally caused by a strain from galloping on uneven ground, wrenching the limb, prancing and leaping, etc. It is one of the evils which occur among the better breed of horses. Man delights in

SOUND HOCK. CURB.



CURB. BANDAGE.

THE SUREST METHOD OF PRODUCING CURB.

showing off the animal he is mounted upon, and so it has ever been with man, woman or child; they are always pleased by the prancing of the horse, which, nevertheless, is a very fruitful cause of curb. Pulling horses up suddenly on their haunches is asserted to be a frequent cause of curb.

Treatment.—Perfect rest; if hot, bandage it and keep it constantly wet with *cold water* and saltpetre for a few days until the inflammation has ceased, then apply Kendall's Spavin Cure two or three times a day, and rub well with the hand. In some cases it is well to apply the bandage after each application of Kendall's Spavin Cure, always applying the bandage as smooth as possible and rather tight. In very bad or very old cases we would recommend using Kendall's Blister, as directed for ring-bone.

DEBILITY.—This condition accompanies many diseases; for this reason anything which has a tendency to reduce the strength of the horse should be avoided while treating the various diseases, especially of the chest.

Symptoms of general debility are swelling of the legs, breast, belly and sheath. The horse is very weak, and staggers as he walks.

Causes are bleeding in treating diseases, starving, and insufficient and improper diet given to sick horses when they should have been supported by good and sufficient food during their sickness.

Treatment.—Give the tonic powders which we recommend under the head of Bots, once or twice a day, with a liberal amount of good feed and water, and allow him to recover wholly before putting him into hard work.

DEFORMITIES IN YOUNG COLTS. are usually caused by an insufficient nourishment; but if the colt is taught to suck milk from a bottle or something else, so as to become well nourished, deformities of the limbs will usually be removed.

DIARRHŒA.—When this disease is not attended with pain, griping or pawing, as in colic, it will generally require no treatment, but if it continues, and the horse shows signs of pain or colic, there is reason for the belief that there is some irritating poison retained in the bowels which does not pass away in the excrement. (See Dysentery.)

Treatment.—Treatment that will allay pain is demanded.

Give twenty drops of tincture of aconite root in a little water, and follow with a powder as given below, every three hours, until the horse is better. Take prepared chalk, 5 drachms; catechu, pulverized, 1 drachm; pulverized opium, 10 grains; mix, and give as stated above. Give plenty of good cold water to drink.

When the diarrhœa is better, give bran mash for a few days, and add a little ground flaxseed if convenient.

DYSENTERY, ACUTE.—This disease in the horse is very violent, because the length and size of the intestines of the horse render any disease within them a very serious affair.

Cause.—Acute dysentery is caused by taking some acrid substance into the stomach, such as croton oil with aloes, which produce an inflammatory purgation; or from the injudicious use of various poisons, such as tartar emetic, corrosive sublimate, blue vitriol, arsenic, etc., etc. Nearly all of these substances will be eaten readily if mixed with the grain, therefore any person not knowing the proper quantities of such poisons to give, should not venture to use them.

Symptoms are obscure at the commencement. As in nearly all disorders of the intestines, so in this, there is pain in the abdomen. The pain may be slight at first or it may be so violent as to be confounded with the pangs of colic; the thirst is excessive; the stench offensive.

The position of the body, as shown in the engraving, is expressive of abdominal pain.

SUFFERING FROM THE EFFECTS OF A POWERFUL POISON.

Treatment the same as for diarrhœa, with larger doses of opium when the pain is violent. Keep the horse and stable clean, and give the horse good care. Do not be concerned about the bowels if they do not move at all for several days.

DISTEMPER.—(Strangles.) This form of sore throat is characterized by swelling between the bones of the lower jaw, which terminates in an abscess.

STRANGLES.

Cause.—A specific poison in the blood, which but few horses escape.

Treatment. — The opinions of different veterinarians vary in regard to the treatment, some recommending poultices while others forbid it, etc., but the following plan is undoubtedly as good a one as any.

Give grass or soft feed and but little, if any, medicine, and if thought best to do anything to hasten the suppuration apply warm poultices, or some like blistering. The appetite will return when the abscess breaks or is opened.

EPIZOOTIC.—This disease attacks many animals at the same time, and originates in one common cause.

Treatment.—A few years ago, when nearly every horse in the country had this disease, hundreds were either not treated at all or improperly treated, and consequently many were left in a bad condition, which they did not outgrow for months, and others died for want of proper treatment. At this time I was called upon to prescribe for many, and I soon found that the following powders were the very best thing I could give: Take of pulv. liquorice 1 lb., elecampane 1 lb., pulv. fenugreek 1½ lbs., pulv. gentain ½ lb., pulv. anise seed ¼ lb., ginger ¼ lb., black antimony ⅜ lb., pulv. saltpetre ½ lb., sulphur ½ lb., epsom salts 1 lb., pulv. resin ¼ lb., hard wood ashes ½ lb., copperas ¼ lb.; mix well, and give a tablespoonful three times a day at first, and then only twice each day.

Every horse that took the above powders recovered fully, and none were troubled with the bad after-effects which followed many that received no treatment.

FARCY.—This is a scrofulous disease affecting the horse.

Symptoms—The hair looks rough and unhealthy; one of the legs will generally swell to a very large size, generally the fore leg—hot and painful—and in a short time will break out in small running sores, discharging a thin, unhealthy fluid, and sometimes the discharge is thicker.

On the side of the neck, body or inside of the leg will be felt a thick substance under the skin but somewhat elevated and hardened, and interrupted at distances with a small sore similar to that on the leg. In some cases soft, puffy swellings will be found about many parts of the body.

Cause.—Poorly ventilated stables which are overcrowded with horses; inoculation from the virus of the glandered or farcied horses, and this virus producing a ferment in the blood. Absorption of pus into the blood is liable to produce either farcy, glanders or some other zymotic disease.

Treatment.—Understanding the cause of this disease you will readily see what the treatment should be—that by removing the cause the effects will cease. Give a tablespoonful of sulphite (not sulphate) of soda twice a day.

This remedy will stop all fermentation and purify the blood. It would be well to continue the sulphite of soda two or three times a week for a few weeks after the horse seems to be well.

After leaving off the sulphite of soda give the tonic powders as directed in the treatment for bots, to improve the general condition of the horse. Give good and generous feed.

Another plan is to give the following powders once or twice a day: Take sulphur, 8 ozs.; saltpetre, 4 ozs.; black antimony, 2 ozs.; mix, and give one tablespoonful.

Another mode of treating this disease is to give three drachms of sulphate of copper every night, in the food, until the horse refuses to eat. After a few days, repeat; but if the case is bad, give the medicine as a drench in water, for ten days, if he will not take it in his food.

The horse, as well as all his clothing and articles used in feeding him, should be removed from all healthy animals, as this is one of the contagious diseases of the horse.

FIRING HORSES.—I can fully indorse the following statements of Dr. Robt. McClure in regard to this inhuman practice. He says: "This is an operation which is a great favorite, and in much repute among horse doctors. For my part I think it not only cruel and barbarous, but unnecessary, doing no good whatever, and in many cases a positive injury, the effects of which will never disappear from the legs and body while the animal lives. Firing is intended by its advocates to prevent and cure spavin, curbs, sprains and ring-bones by scoring the parts with a red hot iron in lines over the part that is thought will *be* diseased or is already so." (See Cautery.)

FOOT DISEASES.—*Navicular disease.*—(See engraving on cover for location.)

This is a serious disease, and is sometimes very obscure in its symp-

toms, according to the stage of the disease. Fortunately this disease is rarely met with, but it is a fruitful cause of permanent lameness. It is many times attributed to some difficulty in the shoulder.

Cause.--Hard work upon pavements causing slight inflammation which is neglected, and the horse kept at work so that the inflammation continues until it ends in ulceration.

Symptoms are obscure and yet very much like many of the symptoms of other diseases of the feet and legs and shoulders. It is determined chiefly by an undue amount of heat in the foot, and by the fact that no disease can be found elsewhere or of a different character.

Treatment.—Raise the foot and pour Kendall's Spavin Cure on to the frog and the back part of the foot and heel, and rub it well up into the hair, repeating this process two or three times a day, for two or three weeks, or more, if necessary. In bad cases, if the lameness does not subside in two or three weeks, we would recommend to blister as recommended for ring-bone, and follow up with the use of Kendall's Spavin Cure. The above treatment has proved to be the most satisfactory of any treatment known to us.

Poultices sometimes relieve the pain.

FOUNDER. (*Laminitis.*)—This disease is inflammation of the sensitive laminæ of the foot, of which there are two kinds, acute and chronic, the latter being a continuation of the former. The acute form is invariably cured, if properly treated, but the chronic form is generally considered incurable ; it can be relieved very much, but the feet are always afterwards sore and tender in front.

Cause.—Allowing to drink cold water, when overheated and tired from overwork, standing in the cold air (or where the wind will strike the horse) while warm, driving through a river while warm, long and hard drives over dry roads, etc.

Symptoms.—The horse will stand upon his heels, with fore feet and legs stretched out as far as he can get them so as to throw the weight off as much as possible ; and he can scarcely be made to move. The horse has fever and considerable constitutional disturbance, in the acute form of the disease.

Treatment (*of acute founder.*)—Give the horse a good bedding of straw, in a large, well ventilated stall, so as to encourage him to lie down, which, by removing the weight from the inflamed parts, will relieve his sufferings very much and assist in hastening the cure. As soon as his bed is fixed, give him twenty drops of the tincture of aconite root in a half pint of cold water, poured into his mouth with a bottle having a strong neck, and repeat this dose every four hours until six or eight doses have been given. Also apply a cloth wet in ice-water to the feet, and keep wet with the same for

several hours until the severe pain has been relieved. Wet the cloths often, and continue for two or three days, or longer if necessary. Give plenty of cold water to drink. The above treatment should be adopted as soon as possible after the horse has been attacked with founder. Let the horse have rest until he has fully recovered. Give grass or mashes for two or three days, and then give a good and fair amount of feed.

After the treatment recommended above, if there should still be tenderness, we would recommend the use of Kendall's Spavin Cure to remove it, as directed for foot diseases.

Although bleeding is quite strongly recommended by some, yet I am firmly of the opinion that the above plan, if properly carried out, will be much more successful.

CHRONIC FOUNDER in its worst form is not curable, but may be palliated. The treatment should depend principally upon softening the hoof by oiling well with castor oil, and continuing to keep the hoof well oiled on the bottom and sides up on to the skin.

We would also recommend in shoeing to place a piece of sole leather which will cover the whole of the bottom of the foot under the shoe and drive the nails through the leather so as to hold it as long as the shoe remains on, then pack oakum or cotton batting saturated with tar under the leather so as to soften up the bottom of the hoof. This works admirably in many cases.

Some pare the soles of the feet and then allow them to stand in about six inches of sawdust, wet a little every morning for two or three weeks. This is also a good plan to follow when horses are recovering from acute founder.

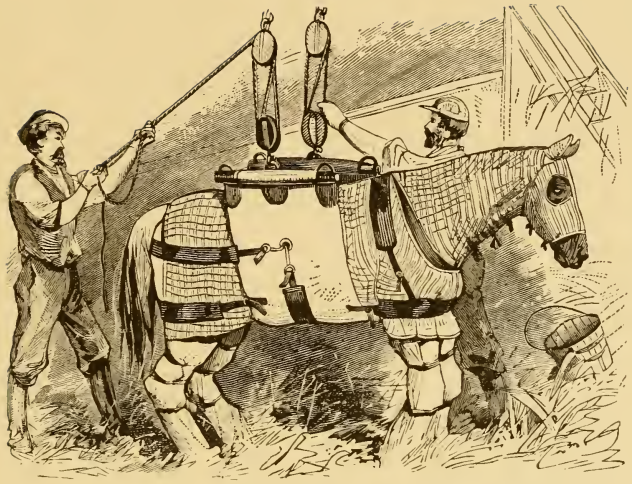
The treatment most likely to effect a permanent cure is that recommended for foot diseases, which see.

FRACTURE.—The term fracture is here used to signify a broken bone. A fracture is termed *simple* when the bone only is divided; *compound*, when in addition there is an external wound of the integuments communicating with it; *comminuted*, when the bone is broken or crushed into several pieces.

The simple fracture is the only variety which calls for much notice, in view of the fact that it is usually of but little use to attempt to treat either of the other two varieties.

Many cases of simple fracture may be successfully treated so that the horse will be useful for many purposes, if not for driving.

Symptoms.—A broken bone is usually detected quite easily, especially when it is a long bone of the leg, as the horse has not the power to move, and also by the looseness of the leg. The horse is in great pain, excitement, sweating, etc.



A GOOD WAY TO SLING A HORSE WHEN IT IS THOUGHT BEST TO DO SO.

Treatment.—If in the summer season, place the horse in the field or yard, but in winter in a large, comfortable stable or in the barn-yard, if well protected from wind and storm. Do not give too much bedding nor allow anything to be in the way of the foot, so that it can be carried without interruption. Give twenty-five drops tincture aconite root every five hours, for the first twenty or twenty-five hours, to lessen the fever and pain.

Place the broken leg in a position as near like the other as possible in shape and also (by actual measurement) to be of the same length, for it is by neglecting the measurement that some are left to unite shorter than the sound leg.

When the leg is placed in the same shape and length of the sound one, apply a good coating of tar to the leg, around, below and above the point of fracture. Then wrap the whole leg in carded cotton or coarse tow, and place over this splints cut out of pieces of boards, which will rest evenly upon the leg prepared as above, and fill all unevenness with the tow or cotton.

Have three or four splints, so as to hold the leg in position constantly. Secure the whole by carefully applying a strong bandage, or by tying with soft cord, and make it perfectly secure, so that the horse will not move the leg where fractured before it has had time to unite.

It is considered by some as bad practice to sling a horse from his feet

in cases of fracture, and he will seldom put his foot to the ground until the fracture has united, so that it is not necessary to sling.

Examine the splints daily and see that they do not get loose.

Give the horse a liberal amount of good feed and cold water.

When the horse is kept in a stall it is well to make a hole in the floor, underneath the foot of the broken leg, so that he can stand with the leg at full length.

With the splints properly applied the horse may safely be left to himself and nature will do the rest.

FROST BITES.—A state of numbness or torpifaction of a part of the body, caused by intense cold, which, unless relieved by proper remedies, is liable to be followed by death of the part. Horses are most liable to be troubled with frost-bites on the heels and the back part of the hind legs, which swell badly, and are sometimes mistaken for scratches.

Treatment.—It is very important in the treatment of frost-bites that heat should not be applied suddenly, but that very cold water be applied, by which means the frost is extracted very slowly.

Any frozen parts should not be rubbed until the frost has been extracted.

After the heat has returned to the part, we know of nothing which we think will work better than Kendall's Spavin Cure, applied several times; as by so doing the great pain and soreness which is sure to follow is generally averted, and thus the bad running sores which sometimes follow are prevented. The above treatment is also well adapted to frost-bites on man.

GLANDERS.—This disease is alike fruitful of evil to man and beast, and is generally considered incurable.

A horse may have latent glanders for years, and work well, the disease being during this time as contagious as in its developed state.

Cause.—The cause is somewhat varied in different cases, and may be attributed to filth, starvation, or to debilitating diseases, as lung fever, catarrh or any disease capable of generating pus, which being absorbed into the circulation forms a ferment within the blood.

Symptoms.—The membrane lining the nostrils assumes a leaden or purple color, accompanied by a thin, acrid, transparent and odorless discharge. This is the first stage, during which the general health does not suffer and the horse may do his ordinary work.

The discharge grows thicker, and sinks when placed in water. The membrane lining the nostrils will be found to have sores, ragged and depressed at the top, with varicose veins leading to them from all sides.

The appetite fails, and the horse assumes an emaciated and dull appearance. He will be hide-bound, and his legs swell during the day and the swelling go down at night.

The ulceration of the nose is very bad, and the sores spread into his throat; the body also is sometimes afflicted with sores. The horse ultimately dies in a wasted condition.

Treatment.—Most horsemen recommend that the horse be shot as soon as it is decided that he is afflicted with glanders, as they consider the disease incurable, but if the following treatment is adopted early it may prove successful:

Give from one-half to one ounce doses of sulphite of soda at night, in cut feed, for several weeks, and five grains Spanish flies (powdered) with it. Give, at the same time, every morning and noon, a powder consisting of three drachms powdered gentian, and two drachms powdered sulphate of copper. Give the medicines for a long time, not only to cure the disease but to improve the general health. Give a good liberal feed, and change the feed often.

GREASE HEELS.—This disease of the heels and legs of horses is characterized by a white, offensive, greasy discharge from the heels of the horse. The skin becomes hot, tender and swollen, and sometimes sloughs away, leaving an ugly sore.

Cause.—Sudden changes of the temperature of the earth, whether it be from heat to cold or from wet to dry. This disease generally follows wet streets, stables or lands.

Treatment.—Keep the legs dry and cleansed well with castile soap and soft water; then apply, once a day, verdigris, one-half ounce; rum or proof spirits, one pint; mix, and shake well before applying. Or apply Kendall's Spavin Cure after washing well. Some use water, one pint; sulphuric acid, two drachms; corrosive sublimate, one drachm. Mix, and shake before using. Some cases will be cured by keeping clean and applying glycerine, four ounces; carbolic acid, one drachm; mixed, and applied twice a day. While some cases are cured quite readily, others will not heal for a long time.

For obstinate cases use the following: Take one pound concentrated lye and dissolve it in two quarts water, and bottle for use; when needed, pour a wine-glassful of the solution of lye into six quarts of cold water, and wash and bathe the heels for half an hour, night and morning. Dry the heels often after the bathing, as they will become very moist. (See Scratches.)

HEAVES.—This disease is due to rupture and enlargement of the air cells of the lungs, which lessens the value and usefulness of the horse.

There is every degree of intensity to be seen in this disease, from the case that is so slight that only the expert can detect it, to the one where the patient finds it *very* difficult to breathe, even when not being exercised.

Cause.—In cases of heaves, horses are always greedy eaters; and it is

generally found that they have been fed an enormous amount of hay or coarse food, which they are quite sure to eat if they can possibly find room for it.

Heaves are never found in racing stables, where the horses are properly fed; consequently, it is but reasonable to attribute the cause to overfeeding with hay and coarse feed.

Treatment.—Restrict the quantity of hay and increase the amount of grain feed, which will give the lungs increase of room to act.

I shall give here various receipts which experience has proved to be good.

LISTENING TO THE SOUNDS MADE WITHIN THE WIND-PIPE.

FAVORITE RECEIPTS FOR HEAVES.

1st. Asafœtida pulv. one oz.; Camphor gum pulv. one-half oz. Mix, and divide into four powders; feed one every other night for a week.

2d. Resin, two ozs.; tartar emetic, two ozs.; Spanish brown, two ozs.; cayenne, two ozs. Mix, and give two teaspoonfuls, twice a day, in the feed.

3d. A horseman with whom I am acquainted says he has cured several cases of heaves with oil tar. He gives the ordinary case a teaspoonful every night or every other night, by pouring it on to the tongue and then giving some grain which carries it into the stomach.

He says he has given very bad cases two or three tablespoonfuls at a dose with grand results.

He reports it to be the best remedy in use, and also good for any cough, or to put a horse in good condition; in fact, it is his "cure all."

4th. The Condition Powders recommended for Epizoötic have proved themselves to be a most excellent remedy when fed quite freely for a few days. (See treatment for Epizoötic.)

HIDE-BOUND.—A term used to denote the adherence of the skin to the ribs when the horse is diseased. It usually arises from a deficiency in the quality or quantity of food, and is commonly an attendant on lingering diseases.

Treatment.—Give mixed feed—cut hay, bran and corn meal, wet with just enough water to cause the whole to keep together.

The following powders should be given in the feed, every night for two weeks:

Powdered gentian root, three drachms; powdered sulphate of iron, two drachms. Mix, and give for one dose.

HINTS ON FOOD.—1st. The foundation of many diseases is laid in

feeding all horses in the same proportions, without any regard to age, constitution, or the work which the horse is required to do. The impropriety of such a course is readily seen.

2d. Bad hay has not proper nourishment in it; therefore it would be poor policy to buy it simply because it is cheap, as it is often very dear in the end.

3d. Old horses will do better on chaff than on hay, as they can chew and digest it better.

4th. There is not sufficient nutriment in grass or hay alone to support a horse well under hard work.

5th. Corn which has been damaged is very injurious, as it will produce inflammation of the bowels and skin diseases.

6th. Oats and corn are the best nourishment if a horse is worked hard, but if not, it should be chiefly hay, because corn and oats supply more nourishment and flesh-making material than any other kind of food; but hay not so much.

7th. For a coach horse four to six quarts of good oats and eighteen pounds of good hay are usually sufficient. If a horse should be worked hard, he should have more of each; but if worked but little, he should have less.

8th. Chopped hay sprinkled with a little water, which has had a teaspoonful of salt dissolved in it, is quite pleasing to the taste of the horse, and is also more easily digested.

9th. Spring or well water is not usually as good for a horse as water from a stream or pond, as the former is usually hard and cold.

10th. Horses require and should have at least a pailful of water, morning and evening; or, what is better, give a half pailful at four different times in a day.

11th. A horse should not be driven nor worked hard directly after he has had a full draught of water, nor soon after eating heartily, as exertion prevents digestion.

12th. Do not allow a horse to become accustomed to drinking warm water, for if compelled to drink cold at any time it will be liable to cause colic.

13th. Do not work or drive a horse if he refuses his food, after drinking, until you have given him rest.

14th. Do not feed nor water a horse directly after his coming in very warm, but let him walk about until cool; groom him quite dry first with a wisp of straw and then with a comb and brush, and rub the legs well with the hand. When he is cool give him his grain.

HIP-JOINT LAMENESS. — This disease is generally seen in young horses and may be caused by rheumatism or by some accident, although it is due oftentimes to a hereditary taint.

Symptoms.—The leg appears shorter, and, when the horse is standing, is placed slightly under the body and not doubled up, or standing upon the toe, as is seen in diseases of hock-joint. In nearly all cases of so-called hip and whirl-bone disease, the true seat of disease will be found to be in the hock-joint. (See Spavin.)

In hip-joint lameness there is a dragging or swaying motion of the limb outward. An extra degree of heat will be found over this joint.

Treatment.—Give the horse absolute rest for a few weeks, and begin, when first allowed to rest, to apply cold water cloths over the hip-joint, which continue one or two days or more, until the heat and tenderness have been removed.

Then apply Kendall's Spavin Cure two or three times a day for two or three weeks, or longer if necessary, and allow a week's rest after stopping its use.

INFLAMMATION OF STOMACH *is caused* generally by some poison given to improve the coat of the animal. Some persons are in a habit of giving powders composed of poisonous drugs to improve the general appearance of the horse, and which, if given in proper quantities and sufficiently diluted, so as not to come in contact with the coating of the stomach while in its full strength, might perhaps do good in many cases, but when given by an ignorant person, it is sometimes given not only full strength, but in large doses, on the principle that, if a little will do good, a larger amount will do more good.

Symptoms.—The horse is frantic on account of the excessive pain, but the symptoms are not decided in all cases.

The following symptoms occur, but not all in each case; nor do they occur simultaneously: Great thirst; loathing of food; redness of the membranes; frequent eructations which smell bad; discharge of thick saliva; rolling, pawing, colic; striking at the belly; panting; tucked-up flanks; quick and small pulse; passing mucus in large quantities; straining; looking at the abdomen; loss of strength; convulsions; madness, and death.

Treatment.—Give at once 2 ozs. tincture of opium, 1½ ozs. sulphuric ether, and 2 ozs. magnesia, in one quart of *cold* gruel or milk, and repeat if necessary.

SUFFERING FROM ACUTE INFLAMMATION OF THE STOMACH.

If corrosive sublimate is known to be the poison, give fifteen or twenty raw eggs with the above drench.

INFLUENZA.—An epidemic disease occurring in the spring of the year.

Symptoms.—A chill, succeeded by increased heat of the body, and fever, cough, discharge of mucus from the nose, loss of appetite, great prostration, followed in a day or two with swelling of the legs, and, in some bad cases, of the belly, breast, etc. These symptoms vary some in different cases.

Treatment.—Cover the horse with a good blanket, and place him in a good comfortable stable, with proper ventilation but not too cold. Give twenty drops of tincture of aconite root in a little cold water, every four hours, until four or five doses have been given, and allow the horse plenty of good cold water to drink.

A FREQUENT SIGHT WHEN IT WAS THE CUSTOM TO BLEED AND TREAT TOO ACTIVELY IN THIS DISEASE.

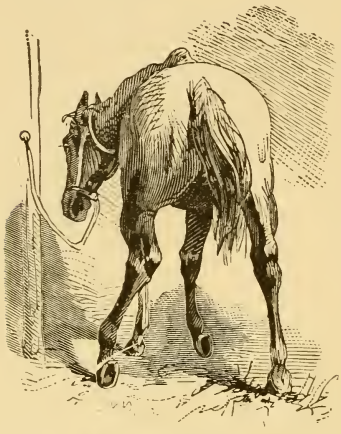
Then give the following: Powdered gentian, 4 ounces; powdered fenugreek, 4 ounces; and powdered licorice root, 2 ounces. Mix, and divide into twenty-five powders, and give two or three each day. Allow the horse to have rest until he has fully recovered.

INTERFERING.—This is usually the result of weakness of the horse, although the blacksmith is frequently blamed for it, and perhaps justly, sometimes, on account of being somewhat careless, when the interfering might have been avoided with a little care. Yet the cause is generally weakness.

Treatment.—Give the strengthening powder recommended for the treatment of bots, and feed well.

KIDNEYS, DISEASE OF.—The straddling gait, as represented in the

engraving below, is not peculiar to any one disorder of the kidneys more than to another, but when it is seen it is always the result of some disorder of the kidneys.



SYMPTOMS OF DISEASES OF THE URINARY ORGANS.

GRAVEL.—Calculi, stony or gritty matter formed in the kidneys, which passes off in the urine. It causes some irregularity in making water.

Treatment.—Give thirty-five drops of muriatic acid, in a pailful of water to drink, and repeat twice a week.

Bloody urine should be treated by placing warm water cloths over the back, above the kidneys, and giving flaxseed tea to drink, which will soothe the parts. When old horses are troubled with kidney diseases they can be helped a great deal by giving soft feed, such as boiled or steamed feed, or newly cut grass, with flaxseed tea and plenty of good cold water to drink at all times.

INFLAMMATION OF THE BLADDER.—Symptoms almost the same as those of inflammation of the kidneys. The tenderness is found when the horse is pressed upon under the flanks.

Treatment about the same as for inflammation of the kidneys, which see. Give a quart of raw linseed oil or other physic, as for inflammation of the kidneys.

INFLAMMATION OF THE KIDNEYS is caused by poor provender, hard work, slipping, taking a sudden cold after a hard day's work or drive, or after being under the saddle for a long time; and also, by an indiscriminate use of nitre or other diuretics.

Symptoms. — Quickened and short breathing, suggestive of pain ; more or less fever, with quick, hard pulse; unwillingness to move the hind legs which the animal straddles apart when he walks, as shown in the engraving above ; looking anxiously around to his flanks ; urine scanty and high colored, and sometimes

TEST FOR INFLAMMATION OF THE KIDNEYS.

bloody. The horse seldom lies down and almost refuses to move about, and crouches beneath pressure made over the kidneys, as shown in the engraving. This disease is sometimes confounded with colic, which see.

Treatment.—Do not give any diuretics, as they will do more harm than good. Use hot fomentations over the kidneys, and change the cloths often. In the first stage give twenty to forty-five grains of powdered opium, and fifteen grains of calomel, sprinkled on the tongue, and repeat every hour or two, for a few times, or while the acute stage continues. No food will be necessary during the acute stage of the disease, but it would be well to set before the horse a pailful of good linseed tea and allow him to drink all he will. If the pulse is quick and hard, as is usually the case, give twenty drops of tincture of aconite root, either between doses of opium and calomel or after it has been given, and repeat until the pulse becomes slower and softer. Give the horse a month's rest, and use carefully for some time.

LAMENESS.—It occurs as a symptom in spavin, ring-bone, bruises, sprains, fractures, and many wounds and injuries, which we treat of in their proper places. We do not know of any remedy which equals Kendall's Spavin Cure, for lameness of every kind, and it is equally good for lameness on man.

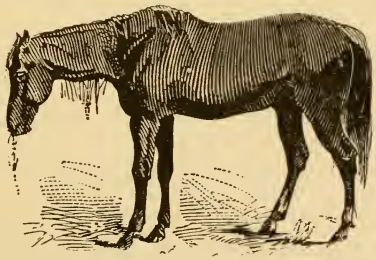
LAMPERS, (written also, Lampass).—A swelling of some of the lower bars of a horse's mouth; so named because formerly removed by burning with a lamp or hot iron.

Treatment.—Pinch or cut the bars until they bleed, and then rub in a little table salt, which is much better than burning the mouth with a red-hot iron.

LUNGS, DISEASES OF.—The lungs are subject to many diseases.

Pneumonia.—(Lung Fever). In this disease the substance of the lungs is inflamed, instead of the air passages, as in bronchitis.

Symptoms.—The horse will oftentimes have a discharge from the nostrils, following a sudden exposure to cold, after being kept in a *warm stable*, and then the disease is ushered in by a chill, followed by fever, which is increased for a short time; cold legs and ears; quick and wiry pulse; quick and difficult breathing; pain in the chest, which is aggravated by coughing; and a quivering of the muscles of the side and breast.

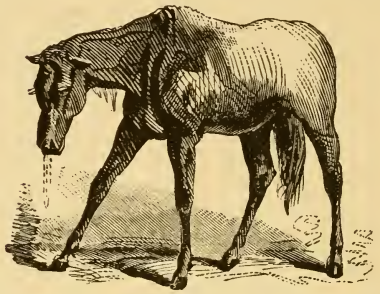


COMMENCEMENT OF INFLAMMATION OF THE LUNGS.

The horse will not eat, and continually stands with his head down and ears lopped, and will not lie down nor move about; the nostrils are expanded.

If the ear is applied to the side of the chest or neck, a peculiar creaking noise is heard.

Cause.—Perhaps one of the most frequent causes is a hard or fast drive against a *cold* wind, after being taken from a warm, tight and poorly ventilated stable, where several horses have remained through the night; or some different alteration and sudden change of heat, cold or moisture in an animal not accustomed to work, or in one not in proper condition to work.



POSITION ASSUMED IN THE LAST STAGE OF PNEUMONIA.

Treatment.—The stable should be a comfortable place; not too cold and yet *well* ventilated. Give the horse clothing according to the weather, but do not change from a heavy blanket to a light one, nor to one that is damp. Keep the legs warm with bandages.

Give twenty-five drops of the tincture of aconite root, in a cupful of cold water, and repeat the dose every four hours, until five or six doses have been given, which will probably cause the horse to perspire freely. Care should be taken not to allow the horse to stand in a draft of air. Do not bleed, as some recommend. It was my misfortune, in my early life, to place a horse, sick with this disease, under the care of a *so-called* veterinary surgeon, who bled the horse freely, and directed to give him large doses of Dover's powder every four hours. I was not only the five dollars out which he charged me, but came very near being out a good horse. The horse was about ruined for life, and probably would not have lived but for my own timely interference, by supporting the horse with vigorous tonic and stimulating treatment. When the disease turned (as commonly expressed) the horse needed *every drop* of the blood which had been so cruelly taken from him.

After the horse has taken sufficient tincture of aconite root, as soon as he seems to have an appetite for food, a pint of crushed oats, thoroughly scalded, may be given during the day. Great care should be taken not to allow the horse a large amount of food at one time, which would overload the stomach, and might cause a return of the disease. Little and often must be the rule at first, and then the quantity may be increased, while the frequency is diminished. Do not give any hay for several days.

Raw eggs and other nourishing and stimulating articles may be given, if the horse shows signs of great weakness. The nourishment should be in a concentrated form, and hay and grass should be kept from the horse for a

few days, and then given in quantities small at first and gradually increased. The horse will not lie down until improvement has taken place.

PLEURISY.—This is an inflammation of the membrane covering the lungs and lining the cavity of the chest.

Symptoms.—A chill, fever, an occasional painful and short cough, and careful breathing, and a disinclination to turn short. A peculiar line will usually be seen running from the haunch, round the belly to the breast-bone. The breath is not so quick and short as in inflammation of the lungs.

Causes.—Broken ribs or wounds, and other causes similar to those producing lung fever.

Treatment.—The treatment should be about the same as for lung fever. Feed well while the horse is convalescing.

ABSCESS OF THE LUNGS.—This is sometimes the termination of lung fever, and is very much to be dreaded.

Treatment.—Should be the same as for glanders, and the patient should be supported, if necessary, by giving raw eggs, tonics, stimulants, etc.

NASAL GLEET.—This is a chronic discharge from the nostrils, of a whitish, muco-purulent matter. It is generally caused by neglecting to treat catarrh and colds properly. The horse may look well and feel well, and the general health be quite good.

Treatment.—Give a course of tonic powders, and feed well. Powders like those recommended in the treatment of bots will do well.

NAVICULAR DISEASE. (See Foot Diseases.)

POLL EVIL.—This consists of a formation of pus like an abscess, and is familiar to all horsemen.

Cause.—Disease of the bone, or injury to the part.

Treatment.—Open the swelling as soon as it has become a little soft, before the pus has had time to burrow down among the bones, and thus prevent the spread of the disease.

Make a large opening so as to allow all the pus to escape, and clean out well, if necessary, with a swab, so as to remove all the pus, and do this twice a day as long as any pus remains. Syringe out with a solution of carbolic acid, fifty drops to each pint of soft water.

PROUD FLESH.—A name commonly used to describe an excessive growth of flesh on an ulcer, or excessive granulation. To cure this, sprinkle a little powdered blue vitriol or burnt alum on the surface.

QUITTOR.—A chronic abscess in the hoof, caused by a bruise or prick of the sole, or from the calk of one foot being pressed into the coronet of the other, confined pus from suppuration, corn, etc.

Symptoms.—The horse is very lame on account of the inflammation before suppuration takes place, but is relieved somewhat as soon as the quittor has burst.

Treatment.—This should begin as soon as any lameness is discovered from any of the above named causes, and the inflammation stopped, if possible, before suppuration takes place. Kendall's Spavin Cure, applied freely to any of the injuries which result in quittor, will prevent this termination, if applied in season; but if it is not cut short, then keep clean and apply a solution of carbolic acid, one ounce, to water, one quart.

Poultices of flaxseed meal are sometimes very useful.

RHEUMATISM.—In acute rheumatism there is great excitement and fever, with severe pain in the legs and joints. This pain is so severe that the horse hardly dares to move from the place he occupies, on account of the extreme pain which it causes. He has no unnatural heat in the feet, as in founder.

Cause.—Exposure to a draft of cold air when a horse has been heated, thus suddenly checking perspiration.

Treatment.—Place the horse in a good, comfortable stable, as soon as possible after it is discovered that he is afflicted with acute rheumatism, and commence the following treatment: Give the horse about twenty-five drops of the tincture of aconite root, every four hours, until five or six doses have been given.

Cover with a blanket, and give the horse general good care. Give the following powders as soon as the tincture of aconite has been given: Bicarbonate of soda, 4 ounces; sulphur, 8 ounces; saltpetre, powdered, 4 ounces. Mix, and divide into eight powders, and give two or three times a day, according to the severity of the case, and repeat if necessary.

Apply Kendall's Spavin Cure to the joints, or to any part which swells or is tender.

CHRONIC RHEUMATISM.—This is a frequent cause of lameness, and it is oftentimes quite difficult to decide fully as to the cause of the lameness.

Treatment.—For this form of the disease we recommend the same powders as given above for acute rheumatism, only to be continued a longer time, and to apply the Kendall's Spavin Cure to the afflicted parts. Only a small quantity need be used at a time, but it should be rubbed well down to the skin, and continued for several weeks if it should be necessary to continue so long. The Kendall's Spavin Cure, used twice a day, is also the *best external remedy* we know of for this disease in man; but it should be used for some time, as the disease, when of long standing, can not be cured in a few days. It may be applied, a small quantity at a time, and continued for from one to three or four weeks, if necessary.

RING-BONE.—(For position see plate of skeleton.) Ring-bone is the result, usually, of weakness, hereditary predisposition, or of a peculiar formation of the pastern joints which makes them poorly adapted to hard work; and therefore a provisional callus (or bony substance) is thrown out as a provision of nature to strengthen parts which are too weak.

Only slight injuries to such a joint as we have described above will in many cases result in the growth of a ring-bone.

Treatment. The treatment of ring-bone has been very unsatisfactory in the past and is still attended with much difficulty in some cases, especially those of long standing and on old horses; yet we feel certain that the following treatment will prove successful in a large share of cases, if persevered in. We find many persons who expect a cure too soon, and condemn the best treatment possible before they have used it long enough for it to have any effect whatever, and therefore we say if you would treat ring-bone successfully never stop in a few days, as so serious an affection can not be removed in so short a time. If it is of recent origin, and the horse is young, we feel confident that nearly all such cases can be cured with a proper use of Kendall's Spavin Cure; but if the case is of long standing, and on an old horse, the chances of a cure are lessened, and therefore we find it necessary in many cases to use, with the Spavin Cure, Kendall's Blister, as per direction on the bottle.

RING-BONE.

1. The joint between the pastern bones.
2. The joint between the lower pastern (or small pastern) and the coffin bone.

In using the Kendall's Spavin Cure, clip the hair over the bunch and apply from every other day to two or three times a day as seems to work best; rub well with the hand often. In most cases it would be well to apply soft soap, once in four to ten days, to soak up the scab, then clean off and apply Kendall's Spavin Cure again. In some very bad cases, where the Spavin Cure does not seem to remove the bunch and lameness, after using one bottle, it would be best to use our Blister, followed by the application of Kendall's Spavin Cure every day for two or three weeks, when the Blister can be repeated, if necessary.

In using Kendall's Blister clip the hair over the bunch and rub in the Blister well for ten minutes or more. Put on some sweet oil or other grease in two days. When the inflammation subsides wash with castile soap and warm water, and when it is dry apply Kendall's Spavin Cure as directed on bottle. If the case does not yield in two or three weeks, use the Blister again as before, followed by the Spavin Cure in two or three days.

Tie up the horse's head for a few hours after the Blister has been applied. We would say that this Blister works admirably alone in many cases (not

only for ring-bone, but also for spavins, curbs, etc.) and is particularly of great value in connection with the Kendall's Spavin Cure for old and bad cases which do not seem to yield to the use of the Spavin Cure alone.

(Where the Kendall's Blister can not be had of your druggist, send $1 to B. J. Kendall & Co., Enosburgh Falls, Vt., and they will send a box by return mail.)

Give the horse a few weeks' rest after the cure seems to be complete.

SADDLE GALLS are sores produced by the saddle or by any other part of the harness.

Treatment.—The cause should be removed by attending to the saddle or other part of the harness, and adjusting it so as to remove the pressure. Kendall's Spavin Cure is used with excellent success for all such sores by applying a small quantity twice a day. If the Kendall's Spavin Cure can not be obtained, get at a drug store laudanum two ounces, tannin two drachms, and mix and apply twice a day.

SCRATCHES.—An inflammation of the skin of the heel of a horse, the first appearance of which is usually a dry and scurvy state of the skin of the heel, with redness, heat and itching. (See Grease Heel.)

Treatment.—Wash the affected parts clean with castile soap and warm soft water, and dry; then use glycerine eight ounces, carbolic acid one drachm, mixed and applied twice a day; washing as above, when necessary, to keep the parts clean. (Also see Treatment for Grease Heel.)

It has been reported to us that Kendall's Spavin Cure, applied twice a day, after washing as above, has worked nicely. It is well usually to give condition powders: saltpetre four ozs., sulphur eight ozs., copperas four ozs., fenugreek twelve ozs., gentian four ozs.; mix, and give a table-spoonful twice a day.

SHOULDER LAMENESS.—This is common among young horses when plowing in the furrow, or it may result from a slip sidewise by a horse of any age. Horses in cities are especially liable to this difficulty. The muscles of the shoulder, and sometimes the shoulder joints, are involved.

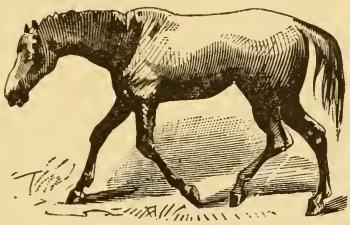
Symptoms.—Heat, tenderness, and sometimes swelling of the parts. It is sometimes difficult to ascertain the exact location of the lameness, but by making a thorough examination of all parts and finding no lameness, heat or tenderness in other parts, it will be quite certain that the difficulty is located in the shoulder, especially if it is found hot and tender. The horse steps shorter with the sound leg than with the lame one, which he drags along. In nearly all diseases of the foot the horse stretches the leg out straight forward, but in shoulder lameness it will be carried out more from the body.

Treatment.—The horse should have entire rest, and the shoulder should have cold water cloths applied to it for two or three days, and changed frequently. As soon as the heat has been reduced, the cold water cloths may be left off and Kendall's Spavin Cure applied twice a day for a few days, or until the lameness subsides. In some cases Kendall's Blister would work admirably.

In applying the Blister, place it where the friction from the collar will not affect it. Allow the horse a rest of two or three weeks after the cure seems to be complete and the treatment is stopped.

SHOULDER-JOINT LAMENESS.—This difficulty, being located in the joint, is much more serious than the shoulder lameness just described, and it is more difficult to effect a perfect cure of it.

Symptoms.—The animal drags the leg, with the toe on the ground, and throws the leg out in attempting to move it. It is with great difficulty that he can raise his foot.



DRAGGING THE FORWARD FOOT AN INDICATION OF SHOULDER LAMENESS.

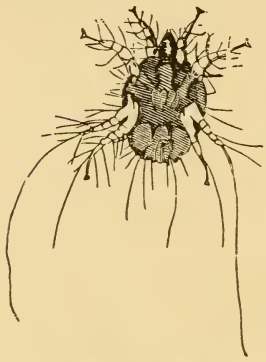
Treatment.—If the treatment is not put off too long a cure may reasonably be expected, if the following directions are followed : This disease being similar to a spavin in the hock-joint, should have similar treatment. If the part is very hot, reduce the temperature by cold cloths as recommended for shoulder lameness, or perhaps hot fomentations may work well instead of the cold; then apply Kendall's Spavin Cure two or three times a day, as directed for spavin. If, after one bottle of Spavin Cure has been used, the case does not improve as fast as is thought it should, use Kendall's Blister, as recommended for ring-bone, and follow it with the Spavin Cure as before. (See also Treatment of Spavin.)

Give the horse a good bedding with dry sawdust or some soft bed for his front feet to stand on, as he will be liable to stamp on the floor with his foot, and in this way you will avoid the concussion to the shoulder.

SIDE BONES.—This is a species of ring-bone. The side cartilages of the joint become ossified, but do not extend around as in ring-bone. The treatment should be the same as for ring-bone.

SKIN DISEASES.—There are many different varieties of skin diseases, and yet many seem to be produced by the same causes but present different appearances in different horses.

BALDNESS.—This is produced by faulty digestion sometimes, when small pimples appear in abundance and contain a fluid. In this form turn the horse to grass or give soft feed.



THE MANGE INSECT.

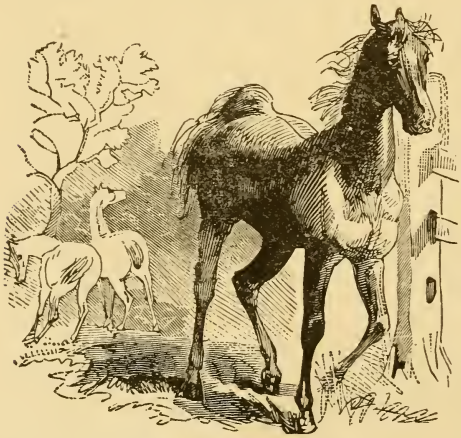
When caused by blisters, burns, etc., if the true skin has not been destroyed, apply, three or four times a week, the following mixture: Glycerine, four ounces; tincture of cantharides, two ounces; mixed.

Some cases do well by using the following: Iodine, one drachm; lard, two ounces; mix and rub down to the skin twice a week.

MANGE, ITCH, ETC.—These are contagious diseases, caused by an insect burrowing in the skin.

Symptoms.—The horse rubs himself against anything he can get at. Small pimples are seen about the head and neck and under the mane. The hair falls off and leaves the skin exposed, with red colored points and fissures. The skin becomes dry and bald, and there is great itching.

Treatment.—Give the horse a good scrubbing, with a coarse brush, and then wash him well with castile soap and water, and dry carefully. As soon as the horse is thoroughly dried, apply an ointment made as follows: Sulphur, four ounces; lard, ten ounces; carbolic acid, half ounce; mixed.



SYMPTOMS OF MANGE.

This disease being contagious, persons should be careful to have everything used about the horse thoroughly cleansed and subjected to great heat, by steaming or boiling, to destroy the insect which is the cause of the disease. It would be well to apply some of the ointment given above to parts of the stall, rubbing-posts, etc.

SORES.—Of the great variety of sores many are what might be termed healthy sores, while others become unhealthy. The former are best treated with tincture of opium

two ounces, tannin one drachm, mixed and applied in small quantities two or three times a day. The unhealthy sore is best treated by cleansing the sore and applying Kendall's Spavin Cure twice a day. In some cases, where there is proud flesh, cauterize the part with nitrate of silver or blue vitriol, and, after a few hours, apply Kendall's Spavin Cure.

Kendall's Spavin Cure has given entire satisfaction whenever used, to our knowledge, for healthy or unhealthy sores on *man* or *beast*. It should be used by applying a small quantity directly into the sore after it has been cleansed.

SPAVIN.—(*For location see cut of skeleton.*) In nearly all cases of lameness in the hind leg the seat of the disease will be found to be in the hock-joint, although many persons (not having had experience) locate the difficulty in the hip, simply because they can not detect any swelling of the hock-joint; but in many of the worst cases there is not seen any swelling or enlargement for a long time, and perhaps never.

BONE SPAVIN is a growth of irregular bony matter from the bones of the joint, and situated on the inside and in front of the joint.

BONE SPAVIN.

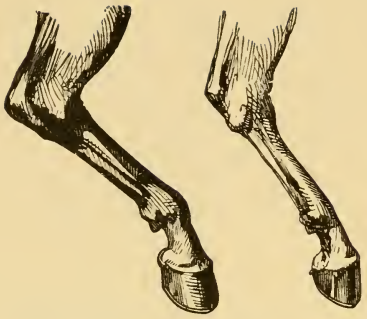
Cause.—The cause of spavins are quite numerous, but usually they are sprains, blows, hard work, and, in fact, any cause exciting inflammation of this part of the joint. Hereditary predisposition in horses is a frequent cause.

Symptoms.—The symptoms vary in different cases. In some horses the lameness comes on very gradually, while in others it comes on more rapidly. It is usually five to eight weeks before any enlargement appears. There is marked lameness when the horse starts out, but he usually gets over it after driving a short distance, and, if allowed to stand for awhile, will start lame again.

There is sometimes a reflected action, causing a little difference in the appearance over the hip joint, and if no enlargement has made its appearance, a person not having had experience is very liable to be deceived in regard to the true location of the difficulty. The horse will stand on either leg in resting in the stable, but when he is resting the lame leg he stands on the toe.

If the joint becomes consolidated the horse will be stiff in the leg, but may not have much pain.

Treatment.—That we may not be misunderstood in regard to what we mean by *a cure*, we would say that we mean to stop the lameness, and in most cases to remove the bunch on such cases as are not past any reasonable hopes of a cure.



Natural action. Leg brought forward. | Effect of a bad spavin. Leg not brought forward.

But *we do not mean* to be understood that in a case of anchylosis (stiff-joint) we can again restore the joint to its original condition; for this is an impossibility, owing to the union of the two bones making them as one. Neither do we mean that, in any ordinary case of bone spavin which has become completely ossified (that is, the bunch become solid bone), that, in such a case, the enlargement will be removed.

In any bony growths, like spavin or ring-bone, it will be exceedingly difficult to determine just when there is a sufficient deposit of phosphate of lime so that it is completely ossified, for the reason that in some cases the lime is deposited faster than in others, and therefore one case may be completely ossified in a few months, while in another it will be as many years.

The cases which are not completely ossified are those that we claim to remove. One of this class which we have seen removed was a large bone spavin of four or five years standing, and we think that a large per cent. of cases are not fully ossified for several months or years.

We are well aware that many good horsemen say that it is impossible to cure spavins, and, in fact, this has been the experience of horsemen until the discovery of Kendall's Spavin Cure. It is now known that the treatment which we recommend here will cure nearly every case of bone spavin which is not past any reasonable hopes of a cure, if the directions are followed, and the horse is properly used.

In using Kendall's Spavin Cure apply it two or three times a day, until the lameness has all subsided, and then gradually decrease the quantity used, or only apply it once or twice a day.

If it is necessary to use the horse much, apply only at night. When the enlargement has been removed, the medicine may be left off, and the horse should have several weeks' rest. Although some horses can be put at light work as soon as the cure is complete, yet we would recommend that all be allowed to rest for several weeks.

Some have an erroneous idea, thinking that, in using a bottle of Kendall's Spavin Cure, it makes no difference about the time taken to apply it, and therefore have used the whole of a bottle in two or three days, and, as they see no perceptible change, they discard the medicine before it has had time to take any effect. To such we would say, only a little

will be absorbed and the remainder goes to waste; therefore apply it only over just the size of the spavin, and enough to wet it well, for two or three times, at each application, and rub it well down to the skin each time, with a small swab, or the finger, until it has been absorbed, and repeat this two or three times a day and *continue using the medicine* until the cure is complete, which takes usually from two to eight weeks, or longer, according to the age and condition of the spavin. Much also depends upon how the horse is used.

In some very bad and old cases, if the lameness does not subside after using one bottle of Kendall's Spavin Cure, it would be well to apply Kendall's Blister as directed on box, and follow up with Kendall's Spavin Cure for two or three weeks, and repeat the Blister several times if necessary. The Blister is not, like some we have seen, so powerful as to destroy the skin and other tissues; yet it is very well adapted, when used with Kendall's Spavin Cure, to the treatment of old and bad cases which do not seem to yield with the Spavin Cure alone. (We will send our Blister by mail to any address on receipt of price, $1.)

After a few days' use of Kendall's Spavin Cure, a thick, firm scab is usually formed, which if pulled off will take the hair with it; yet it does not affect the growth of the hair. The better way is to apply soft soap to soften up the scab, and in two or three hours wash well, and when dry apply again as before. (See Testimonials and other information in another part of this book.)

We give no other treatment, as our experience with various other remedies, including blisters, liniments, etc., has been *very unsatisfactory*, as has been the experience of horsemen all over the world; but Kendall's Spavin Cure, when properly used, has given *entire satisfaction.* (*See "Our Experience with Bone Spavin,"* on page 63 *of this book.*)

Occult Spavin.—This is similar to bone spavin in its nature, the difference being that the location is within the joint, so that no enlargement is seen, which makes it more difficult to come to a definite conclusion as to its location, and consequently the horse is oftentimes blistered and tormented in nearly all parts of the leg but in the right place.

The causes and effects are the same as in bone spavin, and it should be treated in the same way.

These cases are often mistaken for hip disease, because no enlargement can be seen.

BLOOD SPAVIN.

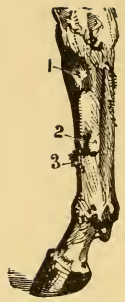
Bog Spavin.—The location of this kind of spavin is more in front of the hock-joint than that of bone spavin, and it is a soft and yet firm swelling. It does not generally cause lameness.

Treatment.—Use Kendall's Spavin Cure, as directed for

bone spavin, and, if the enlargement is not removed in two to four weeks, apply Kendall's Blister, as directed for bone spavin, and continue the Spavin Cure.

Blood Spavin.—This is similar to bog spavin but more extended, and generally involves the front, inside and outside of the joint, giving it a rounded appearance. The swelling is soft and fluctuating. Young horses and colts, especially if driven or worked hard, are more liable to have this form of spavin than older horses.

Treatment.—For this form of spavin (especially bad cases) we would recommend our Blister, to be applied every two weeks for a few times, and the Spavin Cure, to be used between times of blistering, as recommended on box. Rub well, with the hand, often.



1. A splint near the knee.
2. A low splint.
3. A small bony growth on the front of the leg, also called splint.

SPLINT.—This is a small, bony enlargement, and generally situated on the inside of the fore-leg about three or four inches below the knee joint, and occurs frequently in young horses when they are worked too hard.

Treatment should be the same as for bone spavin, which see.

SPRAIN.—By this is meant the sudden shifting of a joint farther than is natural, but not so as to produce dislocation. Every joint is liable to sprain by the horse's falling, slipping, or being overworked. These cases cause a great deal of trouble, oftentimes producing lameness, pain, swelling, tenderness, and an unusual amount of heat in the part.

Treatment.—Entire rest should be given the horse, and if the part is found hot, as is usually the case, apply cold water cloths, changing frequently, for from one to three days until the heat has subsided, when apply Kendall's Spavin Cure, twice or three times a day, rubbing well with the hand.

If the fever is considerable, it might be well to give fifteen drops of tincture of aconite root, three times a day, for one or two days, while the cold water cloths are being applied. Allow the horse a rest of a few weeks, especially in bad cases, as it is very difficult to cure some of these cases, unless the horse is allowed to rest.

STAGGERS.—A disease of horses, resulting from some lesion of the brain, which causes a loss of control of voluntary motion. As it generally occurs in fat horses which are well fed, those subject to these attacks should not be over-fed. The cause is an undue amount of blood flowing to the brain.

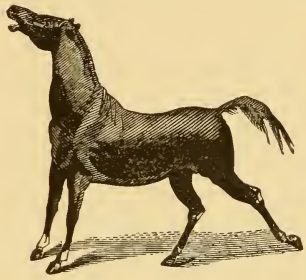
Treatment.—The aim of the treatment should be to remove the cause. In ordinary cases give half a pound of epsom salts, and repeat if necessary to have it physic, and be careful about over-feeding.

In mad staggers, it would be well to bleed from the neck in addition to giving the epsom salts.

STIFLE-JOINT LAMENESS —This is not one of very common occurrence, but occurs occasionally in colts kept on uneven ground, which induces dislocation of the stifle, or patella, which slips off from the rounded heads of the bones when the horse steps.

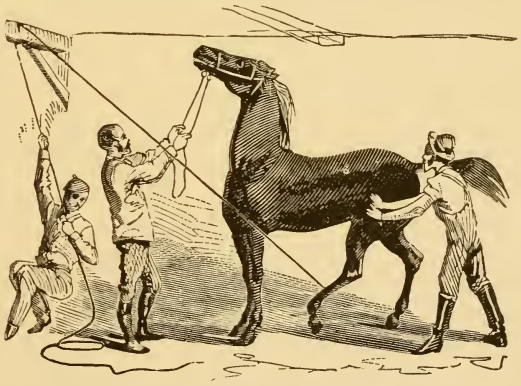
It sometimes occurs in horses which are kept on bad food, or in those which are constitutionally weak.

Symptoms.—The horse stops suddenly and extends one of the hind legs backwards. The pastern is flexed and the head raised, as shown in the engraving, and there is a swelling upon the outer side of the pastern, with great pain. It sometimes occurs in colts on the slightest cause.



PATELLA, OR WHIRLBONE DISPLACED.

Treatment.—Any flurry may restore the bone to its proper place in colts, but for cases which do not become replaced, in colts or horses, get into a shed and fix a rope to the pastern as shown in the engraving, and throw the other end over a beam. Then while one person pulls the leg upward and forward, another should stand by the quarters and push the dislocated patella inward with both hands. Feed well, and give the horse five or six weeks' rest, or place him in a level pasture, and have him shod with a piece of iron projecting from the toe, especially if the toe has been worn off.



THE MANNER OF REPLACING THE PATELLA.

Apply Kendall's Spavin Cure over the stifle, as directed for spavin, to remove the soreness and pain.

SWEENEY. (*Atrophy.*)—This is a wasting away of the muscles of the shoulder, and is said to be caused by some disease in the foot or leg.

Treatment—Treat any disease found in the foot or leg as directed in other parts of this book. Apply to the shoulder soft soap with a little salt added, four or five times a week, and rub well.

THOROUGHPIN.—An affection accompanying blood spavin, and generally caused by excessive labor.

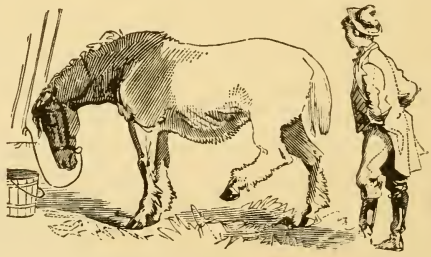
Symptoms.—A round tumor going through the leg and appearing on the outside and in front of the joint of the hock. Thoroughpin is the same disease as blood spavin, on a more extensive scale, causing the enlargement to extend through the joint from one side to the other.

Treatment.—Same as for blood spavin, which see.

TUMORS are swellings or enlargements of any part of the body. They vary according to their situation and nature.

Treatment.—The treatment varies with different horsemen. And we would say that in some cases it might be best to have them cut out, and yet there are many other cases which can be removed by the use of Kendall's Spavin Cure, applied as directed for spavin. We now have in mind a case of a *bony tumor* which had been sawed off by a surgeon, but, from some cause, continued to grow; after it had again reached quite a large size the owner of the horse began to use Kendall's Spavin Cure, and, after he had used one or two bottles, told us that the tumor was nearly removed, and on examination we found it quite difficult to detect it.

WATER FARCY is the result of weakness in the old, and of inflammatory action in the young. By long continued labor, from twelve to eighteen hours each day, the horse, already debilitated, is by abuse made a fit subject for water farcy.



THE DRIVER'S FIRST VISIT ON MONDAY MORNING.

It is the custom of some to feed largely on Saturday night and not to visit again until Monday morning, when they are liable to find the animal, so cruelly treated, with one swollen leg. The horse holds the leg up as seen in the engraving, and will generally be lame. He is in too much pain, and is too tired, to eat, but will be very thirsty on account of the agonies which his cruel treatment has brought upon him. When water farcy occurs, let it be understood that it is because the horse has been worked too long and too hardly, and that if the animal is not better cared for, *Farcy* will be the result.

Treatment.—Let the work be lighter, the nourishment sufficient and of better quality, and the stable kept clean and well ventilated. Lead the horse out, two or three times a day, for gentle exercise. As soon as the

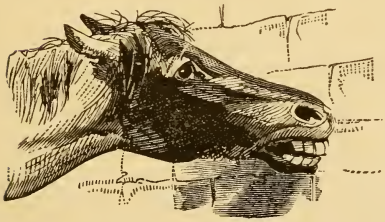
limb will bear friction let it be *well rubbed with the hands*, and this repeated often. Bathe with cold water and rub dry. If the lameness and swelling continue, take two parts of alcohol and one of Kendall's Spavin Cure, mix, and bathe the leg with the mixture, and rub well. Then take iodide of potassium, one drachm; pulv. gentian, one drachm; pulv. ginger, one drachm; sulphate of iron, one drachm; linseed meal, two ozs.; make into a ball, and give at one dose, repeating every day for several days.

Prepare the above balls as they are wanted each day, because the iodide of potassium should be kept in a vial until it is wanted for use. Always begin the treatment as soon as possible.

WIND GALLS.—Soft swellings or enlargements just above the fetlock joints, which are caused by over-exertion or by sprains. They are of a similar nature to blood spavin, and may be treated in the same way; or place exactly on the wind galls pieces of cork covered with cloth large enough to press them down, and wet with Kendall's Spavin Cure, and keep the corks pressed on the galls by the use of a rubber bandage, only removing it when the horse is used and when it is necessary to wet the compress.

Apply only a little of Kendall's Spavin Cure to the compress, and be careful not to have it so tight as to cause strangulation of the leg, but only as tight as can be without causing strangulation. Remove the compress as soon as there are any signs of soreness, and bathe, once or twice a a day, with the Kendall's Spavin Cure, until all soreness has subsided. Care should be exercised in the use of the compress, or sores may be produced. (See directions for the Treatment of Bone Spavin.)

WORMS.—There are several kinds of worms which infest the horse, some of which produce a vast amount of mischief.



The horse rubs his nose violently against a wall when there is irritation from worms.

TENIA. (*Tape Worm.*)—These trouble the young mostly, and are usually caused by starving the mare when with foal, and by breeding from old animals. The dam and sire should be in perfect health if a valuable colt is desired. Gentle work is always better for the mare than to remain without work.

Symptoms.—When tape-worm is present, there is checked development, large head, long legs, ravenous appetite, unhealthy coat, thin body, fetid breath. The colt picks and bites its own hair, rubs its nose against a wall, or strains it violently upwards.

Treatment. Give spirits of turpentine. For a colt three months old give from one-fourth to one-half ounce; six months old, one-half to one ounce; one year, one to one and a half ounces; two years, one and one-half to two ounces; four years, three to four ounces. Also procure one pound of quassia chips and pour three quarts of boiling water on to them; then mix a proportional dose of the quassia infusion with the turpentine, and cause it to blend together by stirring in well with yolks of eggs. Add twenty grains of powdered camphor gum, and give the dose the first thing in the morning.

Feed well afterward, and give every morning until the coat is glossy, muriated tincture of iron, from one to ten drachms, according to age, and also Fowler's Solution, from one-fourth to three drachms.

LUMBRICI.—Long, round worms, which are sometimes seen eighteen inches long. They prey upon the weakly, whether old or young.

Treatment.—Give one drachm tartar emetic, worked into a ball with linseed meal and flour, every morning, until the desired effect is accomplished. Or give calomel, three drachms; tartar emetic, one drachm; mixed, and made into three balls, to be given at night for three nights; and give, one day after the last ball, a good purging ball.

PIN WORMS.—This variety of worms inhabits the rectum, and causes great itching posteriorly, which causes the horse to rub its hair off against the wall.

Treatment.—Most medicines are deprived of their activity because they do not reach the rectum; therefore it is best to treat with injections which will come directly in contact with the parasites. Take one ounce catechu and a quart of water, and, when dissolved, give as an injection, and repeat for seven mornings. On the eighth day give a mash; at night follow with one-half ounce aloes, and one drachm calomel. Repeat the above if necessary. Injections of tobacco smoke work well.

YELLOW WATERS.—This affection is the result of liver disease, and has derived its name from the characteristic color of the membranes of the eyes, nose and mouth, which have a peculiar yellowness that is caused by the liver being diseased, so that its natural functions are not properly performed, and a large amount of bile is thrown back into the blood, instead of being carried off in its natural way, and only eliminated partially through the kidneys. It occurs more often in horses which are highly fed and have nothing to do, than in any others.

Treatment.—Give ginger, two drachms; powdered mandrake root, one drachm; powdered aloes, four drachms; mix, and give at one dose. Feed the horse with soft feed and grass to loosen the bowels. Repeat the above dose as often as shall be necessary, which, in most cases, perhaps, would be about every other day.

DOSES FOR THE HORSE.

Name of Drug.	Action and Use.	Dose.	Antidote.
Aloes.	Laxative and Tonic.	1-2 to 1 oz.	
Alum.	Astringent.	2 to 3 drs.	
Anise Seed.	Aromatic and Stomachic.	1-2 to 2 ozs.	
Aqua Ammonia.	Stimulant and Antacid.	1 to 4 drs.	Vinegar.
Arsenic.	Alterative and Tonic. Used for Paralysis, Mange, etc.	1 to 5 grs.	Magnesia and oil.
Asafœtida.	Anti-spasmodic, Coughs, etc.	1 to 3 drs.	
Bicarbonate of Potash.	Diuretic and Antacid. Good for Rheumatism.	3 to 5 drs.	Vinegar and raw Linseed Oil.
Bismuth.	For Chronic Diarrhœa, etc.	1-2 to 1 oz.	
Black Antimony.	Promotes the Secretions.	1-4 to 1-2 dr.	Infus'n of oak bark. Give also lins'd oil.
Blue Vitriol.	Astringent and Tonic.	1-2 to 1 dr.	Eggs, Milk, etc.
Calomel.	Cathartic.	10 to 40 grs.	Eggs and Milk.
Camphor.	Anti-spasmodic.	1-2 to 1 dr.	
Cantharides.	Diuretic and Stimulant.	3 to 6 grs.	
Carbolic Acid.	Externally and Disinfectant.		Eggs; soap; gruel.
Castor Oil.	Cathartic.	1 2 to 1 pt.	
Cayenne.	Stimulant and Carminative.	5 to 25 grs.	
Chlorate of Potash.	Diuretic. Given for Bloating, etc.	1-2 to 2 drs.	
Copperas.	Tonic and Astringent.	½ to 1½ drs	
Croton Oil.	Powerful Purgative.	10 to 15 d'p's	Opium.
Digitalis leaf.	Sedative and Diuretic.	10 to 20 grs.	Stimulate.
Epsom Salts.	Cathartic and Febrifuge.	2 to 8 ozs.	
Ether.	Anti-spasmodic.	1-2 to 2 ozs.	
Fowler's Solution	Used for Skin diseases. See Arsenic, a preparation of.	1 to 4 drs.	Hydrated peroxide of Iron.
Gentian Root.	Tonic.	to 2 drs.	
Ginger.	Tonic, Stimulant and Stomachic. Used for Flatulent Colic, Dyspepsia, etc.	2 to 5 drs.	
Glauber's Salts.	Cathartic.	6 to 12 ozs.	
Iodide of Potassium.	Diuretic and Alterative. Used for Rheumatism, Dropsy, Enlarged Glands, etc.	1-2 to 1 1-2 drs.	Give freely starch or flour, with water largely.
Linseed Oil, Raw	Cathartic and Nutritive.	1 to 2 pts.	
Magnesia.	For colts as an Antacid and Laxative.	1-4 to 1 oz.	
Mercurial Ointment.	Used for Mange, Itch, Lice, and other parasites.		Whites of Eggs with milk given freely.
Nux Vomica.	Nervous stimulant. Used for Paralysis.	15 to 25 grs.	Saleratus, followed quickly by copperas, both dissolved in water.
Opium.	Anodyne and Anti-spasmodic. Given in Colic, Inflammation of Bowels, Diarrhœa, etc.	1-4 to 1 dr.	Belladonna, strong coffee, brandy and ammonia. Dash cold water on, and keep the horse moving.
Prepared Chalk.	Antacid.	1-2 to 1 oz.	
Quinine.	Tonic. Given during convalescence.	15 to 50 grs.	
Saltpetre.	Diuretic and Febrifuge.	1 to 3 drs.	Linseed oil largely. Raw.
Soda Bicarb.	Similar to Bicarb. Potash.	3 to 8 drs.	
Soda Sulphite.	Antiseptic and Alterative. Used for Blood diseases.	1-2 to 1 oz.	
Solution of Lime.	Antacid, used as an antidote to poisoning by acids.	4 to 6 ozs.	
Spirits of Chloroform.	Anodyne and Anti-spasmodic.	1 to 2 ozs.	
Strychnia.	Tonic and Stimulant. Used for Paralysis.	1-2 to 1 gr.	Tobacco.
Sulphur.	Alterative and Laxative. Used for Skin diseases and Rheumatism.	1-2 to 2 ozs.	

Name of Drug.	Action and Use.	Dose.	Antidote.
Sweet Spirits of Nitre.	Diuretic and Diaphoretic.	½ to 1½ ozs	
Tannic Acid.	Astringent.	20 to 40 grs.	
Tartar Emetic.	Sedative and Alterative.	1-8 to 1-2 dr.	Tannic Acid.
Tincture of Aconite Root.	Sedative. Used for lung fever, etc.	15 to 35d'p's	Give small doses of Nux Vomica, and stimulants largely, and keep moving.
Tincture of Cantharides.	Stimulant and Tonic.	1 to 2 ozs.	
Tincture Ergot.	Parturient.	1 to 2 ozs.	
Tincture Iodine.	Used externally.		
Tincture Iron.	Tonic and Astringent. Used for Typhoid diseases.	1-2 to 1 oz.	
Tr. Nux Vomica.	Tonic. Stimulant in Paralysis and Dyspepsia.	2 to 4 drs.	See Nux Vomica.
Tincture Opium.	Anodyne and Anti-spasmodic.	1 to 2 ozs.	See Opium.
White Vitriol.	Astringent. Used for cuts, wounds and sores, in solution.	5 to 15 grs.	Milk, eggs and flour.

For a colt one month old, give one twenty-fourth of the full dose for an adult horse as given above; three months old, one-twelfth; six months old, one-sixth; one year old, one-third; two years old, one-half; three years old, three-fourths.

IN MEASURING LIQUIDS,

A tablespoonful is equal to half an ounce by measure.

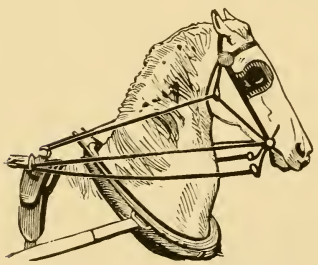
A dessert-spoonful is equal to one-fourth ounce, or two drachms.

A teaspoonful is equal to one drachm.

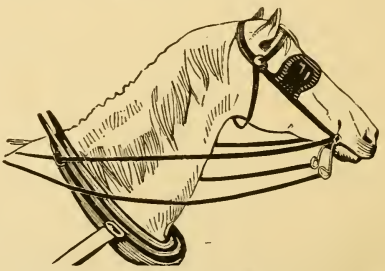
A teacup is estimated to contain about four fluid ounces, or a gill.

A wine glass about two fluid ounces.

The above named household implements vary in size and capacity, so that usually it is difficult to measure with them accurately; yet, for nearly all medicines, it will be near enough for all practical purposes, excepting some teacups are now made to hold six or eight ounces, so that, if the medicine to be measured is poison, it is well to give smaller doses if the exact capacity is not known. It is best for those having much use for measures to procure a glass graduate which will measure drachms and ounces.



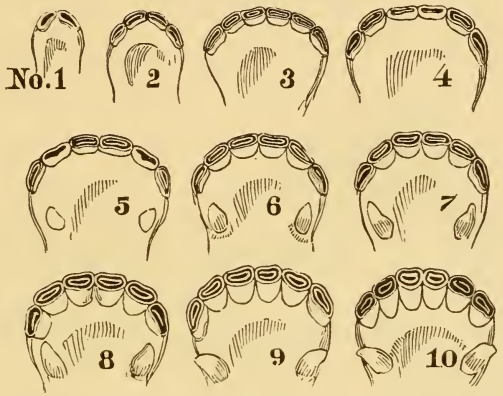
A VERY FOOLISH MANNER OF TORTURING HORSES.



A BETTER AND MORE HUMANE WAY OF TREATING OUR FAITHFUL FRIEND.

THE AGE OF THE HORSE,

Determined by the appearance of the teeth.



The safest way of determining the age of a horse is by the appearance of the teeth, which undergo certain changes in the course of years. Although it may be impossible to give any rules which will be found to be exactly correct *in every case*, yet the following classification is generally correct; but exceptions will occur, as, for instance, a noble horse may be taken for younger than he really is, because the strong structure of all the bones makes the teeth also stronger than those of a horse of the same age, of an inferior breed.

Eight to fourteen days after birth, the first middle nippers of the set of milk teeth are cut (Fig. 1); four to six weeks afterwards, the pair next to them (Fig. 2); and finally, after six or eight months, the last (Fig. 3).

All these milk teeth have a well-defined body and neck, and a slender fang, and on their front surfaces grooves or furrows, which disappear from the middle nippers at the end of one year; from the next pair in two years; and from the incisive teeth (cutters) in three years.

At the age of two, the nippers become loose and fall out; in their places appear two permanent teeth, with deep, black cavities, and full, sharp edges (Fig. 4).

At the age of three, the next pair (Fig. 5) fall out.

At four years old, the corner teeth fall out (Fig. 6).

At five years old, the horse has his permanent set of teeth.

The teeth grow in length as the horse advances in years, but at the same time, his teeth are worn away, by use, about one-twelfth of an inch every year; so that the black cavities of the centre nippers below disappear in the sixth year (Fig. 7); those of the next pair, in the seventh year (Fig. 8); and those of the corner teeth, in the eighth year (Fig. 9). Also the outer corner teeth of upper and lower jaw just meet at eight years of age.

At nine years old, cups leave the two centre nippers above, and each of the two upper corner teeth has a little sharp protrusion at the extreme outer corners (Fig. 10).

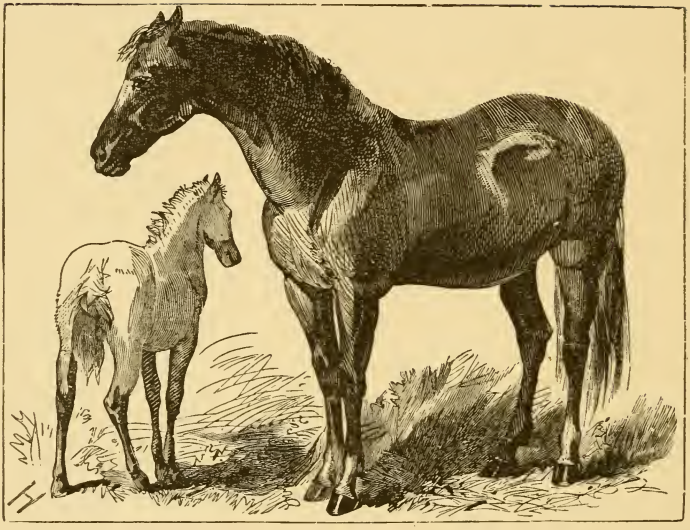
At the age of ten, the cups disappear from the adjoining teeth.

At the age of eleven, the cups disappear from the corner teeth above, and are only indicated by brownish spots.

The oval form becomes broader, and changes, from the twelfth to the sixteenth year, more and more into a triangular form, and the teeth lose, finally, with the twentieth year, all regularity. There is nothing remaining in the teeth that can afterwards clearly show the age of the horse, or justify the most experienced examiner in giving a positive opinion.

The tushes, or canine teeth, conical in shape, with a sharp point, and curved, are cut between the third and fourth year; their points become more and more rounded, until the ninth year, and after that, more and more dull in the course of years, and lose, finally, all regular shape. Mares have, frequently, no tusks, or only very faintly indicated.

BREEDING.



This very important subject is too often neglected. A common mistake in breeding is often made, that mares are bred from after they become useless for work, regardless of hereditary diseases which may be transmitted to their offspring. It should be remembered that one of the characteristic laws of life is the reproduction in kind—"like begets like."

Both parents should be selected with reference to their individual points of excellence, and also so that the points of one may be adapted to the points of the other; for, although both may be excellent individually, the points which characterize one may actually counteract those of the other; but, if defects exist, the breeder should be sure that it is merely accidental and not natural.

None but sound parents should be bred from; (accidents, of course, are not to be regarded as unsoundness). Both parents should be free from any infirmity relative to a vicious temper or bad disposition, although the points of excellence in one way sometimes counteract the bad points

in the other relative to that defect. Great care should be exercised that the same defect does not exist in both. Some knowledge of the parentage of the sire and dam is therefore indispensable.

For ordinary business purposes the best form of a mare to breed from is a short-legged beast, with a deep and roomy chest, wide hips, and so built in every way as to indicate a robust animal, with a strong constitution. Always avoid, if possible, selecting a mare for breeding purposes which has ring-bone, spavin, or any disease that will render the offspring liable to be afflicted with the same, by hereditary descent.

The "breed" should be taken into consideration also. If it is desired to raise a carriage beast, select a mare with a good, animated countenance, sprightly, not too nervous nor too sluggish, but with a general muscular structure. The head of the brood-mare is a point which should be always regarded, for a mare that has a large head, with a dull, stupid countenance, will not breed a good foal, unless it might be from a very sprightly, ambitious horse. The shoulder blade should be wide and long, extending nearly to the top of the withers, and so well covered with muscle as not to present any undue prominence.

The neck should come out from the top of the withers and not low down; the fore-leg should be perpendicular, so that the point of the shoulder and the toe will be in a right line; the foot should be sound, and of good, symmetrical shape.

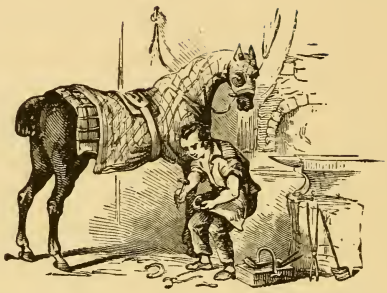
The hips should be long, oval and broad; the hock-joint should be well formed, and not of the "cow-hock" or "sickle-hock" kind.

In selecting a stallion, the rules which we have already given should be observed, remembering that compactness is quite essential, that much goodness and strength may be condensed into a small space. The shoulder should be well back, with the shoulder blade lying obliquely, except that, when it is desired to raise a slow draught-horse, a large stallion, with upright shoulders, should be selected.

In summing up the whole matter we would say, if you would be successful in breeding do not breed into the same family and blood, but select a horse of different blood, unless it should be eight or ten generations removed.

Avoid using a horse which is defective in any particular, when the mare has the same defect, but select one as nearly perfect as possible in that point. Do not breed small mares with very large horses, for there should be mutual adaptation in size and form, as we have before stated.

SHOEING.



With a poor hoof an otherwise valuable horse becomes almost worthless, so that the common saying, "No foot, no horse," is practically correct. For this reason the subject of *horse-shoeing* is one which should receive much attention, as it is by poor shoeing that so many horses are rendered almost valueless for life.

For want of space we can only give some of the more important points which should be observed in order to preserve the hoof in a natural and healthy condition.

The hoof, in its natural state, is adapted only to a grassy surface; so that, when we wish to bring the horse into practical use upon our hard and stony roads, it becomes necessary to protect the hoof, by shoeing, from the unnatural wear and tear which it is subjected to.

It is greatly to be regretted that so large a share of the men who are permitted to do this very important work of shoeing the horse, are so ignorant of the nature and structure of the foot and the principal rules which *should* guide them in doing this very important branch of work.

It is a great fault of nearly all shoers that they cut and pare with the idea of improving the foot, when their aim should be, mainly, to let nature have her course as much as possible, or, in other words, to imitate the natural condition of the foot, and only pare away such parts as have become useless. The shoe should always be fitted to the foot, and not the foot to the shoe, as is too often practiced. That part of the hoof which should not have pressure is the portion between the bar and the quarter, commonly known as the seat of corns. (For location, see engraving on 10th page.)

The greatest pressure should be around the outside of the foot, for about half an inch.

The frog should be allowed to come to the ground, which will prevent, to a certain extent, the concussion which would otherwise take place. *The frog should not be cut down,* as is frequently practiced, nor should it be touched, when healthy, except for the purpose of cleansing.

In paring the foot, be very careful not to cut down the outside, so as to allow the entire weight to rest on the inside of the shoe upon the sole; but only cut away the dead portion of horn on the sole, and cut down the wall from heel to toe until the bearing is natural, leaving it even and as near its natural state as possible. A red-hot shoe should not be allowed to be burned into the foot to fit it.

The shoe to be selected should depend upon the condition of the foot and the condition of the roads, etc. The flat shoe, when properly applied, leaves the foot nearest its natural shape, by allowing the horse a good, even foundation to stand upon, and is most likely to give satisfaction for all ordinary purposes. At some seasons of the year it will be necessary to have calks upon the shoes, but ordinarily the foot should be allowed to come as near the ground as possible.

What we mean by the *flat shoe* is one flat upon its superior surface, which comes in direct contact with the hoof, the under surface being partially concave, so as to assist the horse in grasping the ground, to prevent slipping and to assist in progressing.

The shoe should be as big as the foot so as not to require any cutting down the hoof so as to make it fit the shoe, and the heels of the shoe should not be permitted to project backwards beyond the heel of the hoof more than about one-eighth of an inch.

The outward margin of the shoe should just correspond with the shape of the foot, except at the heel, where the shoe should be a little wider from quarter to heel, especially on the outside.

Many persons are not aware of the thinness of the hoof, which makes it quite necessary that the nail holes should be near the edge, and quite well forward in the toe, so as to avoid driving the nails into the quick, which would cause serious lameness and injury.

Do not rasp under the nail clinches, nor over them; and do not use the rasp at all on the outside of the hoof, not even below the clinches, except just enough near the shoe to round the edge, and do not cut down the hoof if you have used a shoe which is too small.

A nail for a horse's foot differs materially from every other kind of nail, not only in shape, but in the quality of iron from which it should be made; it is important that it should be made from the very best of iron, free from flaws, seams, liability to sliver, and all sulphurous gases in the process of manufacture. It is presumed that every shoer knows that a nail *forged* hot, from the end of a rod, needs no argument to convince any one that a *better* nail is thus obtained than by punching, rolling and shearing them from a cold plate. The numerous and well authenticated cases where valuable horses have been *ruined* by using cold rolled nails, are enough to deter any first-class shoer from driving anything but a *Hot Forged* nail,

even if its cost should be double that of the cold rolled nail, because no shoer can take the risk of injuring his customer's horse.

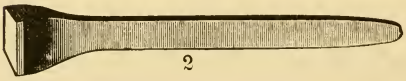
Use only the very *best* of nails; drive as *small* and few nails as will hold the shoe firmly and securely to its place. See that the nails fill the holes and the heads the crease, leaving little, if any, to project beyond the ground surface when finished, thus preventing the clinch from rising when brought in contact with stones, and saving the injuring of the ankle.

This drawing is made from a nail such as is used in Oriental countries, for attaching shoes to their horses' feet, and has been employed since the 15th century.

This is an ordinary *hand-made* nail made from the rod when at a welding heat, and still in use in England and Europe, and also in the United States, until the introduction of the Putnam Hot Forged Nails, which were the first successfully introduced Hot Forged machine nails, and this drawing shows the similarity of manufacture to that of the hand-make, and when in a *finished condition* it is identical with those of hand-make when ready for use, and has no equal in the long list of machine-made nails.

This drawing represents a cross section of iron from which the cold punched and sheared nails are made by forcing a blank therefrom by means of a punch which gives a *blank* similar to No. 1. No. 2 the same as No. 1, but made *hot* instead of cold. These blanks are put through a series of rollers and drawn into the form of No. 3, with an indentation on the thin end for the *scarfed* points, which conduct the nail out of the hoof.

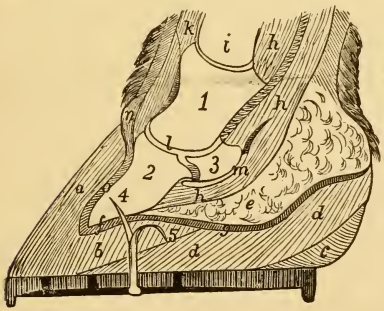
1



2

No. 4 represents the piece which is removed by shearing the blade of No. 3, and produces the nail No. 5 complete. All are aware that the rolling of iron

cold produces what is termed lamination, causing the iron to separate in layers as shown in figure 6 a. But as the compression of shearing holds the edges together, it does not show itself until driven into the hoof, when the horny fibres cause them to separate while being driven, and one portion is forced *into* the foot and the other *out* through the wall of the hoof, thus causing lameness, lock-jaw and death, as has been frequently the case since the introduction of cold rolled nails, which the records of State courts, as well as the testimony of celebrated horse owners, abundantly show.



This drawing was taken from a hoof to show the result of a cold rolled and sheared pointed nail, which produced the death of a valuable animal, and for which carelessness the owner received no remuneration.

MISCELLANEOUS RECEIPTS.

For Colic.

(*See Treatment of Colic.*)

No. 1.—Take of laudanum, 1 ounce; spirits of turpentine, 1½ ounces. Mix, and give at one dose, in three times the amount of warm water.

No. 2.—Sulphuric ether, 1½ ounces; laudanum, 1 ounce; essence of peppermint, 2 ounces; water, 16 ounces. Mix, and shake well before giving.

For Heaves.

(*See Treatment of Heaves.*)

No. 1.—One teaspoonful of lobelia, given in the feed, once a day for a week, and then once or twice a week, will stop them for a time.

No. 2.—Balsam copaiba, 1 ounce; spirits of turpentine, 2 ounces; balsam fir, 1 ounce; cider vinegar, 16 ounces. Mix, and give a tablespoonful once a day.

No. 3.—Saltpetre, 1 ounce; indigo, ½ ounce; rain water, four pints. Mix, and give a pint twice a day.

No. 4.—Liquorice, elecampane, wild turnip, fenugreek, skunk-cabbage, lobelia, cayenne and ginger, equal parts of each. Mix, and give a tablespoonful once or twice a day; if the horse refuses to eat it in feed, make it into a ball and give.

Contracted Hoof or Sore Feet.

No. 1.—Take equal parts of soft fat, yellow wax, linseed oil, Venice turpentine and Norway tar; first melt the wax, then add the others, mixing thoroughly. Apply to the edge of the hair once a day.

No. 2.—Benzine, 1 ounce; salts of nitre, 1 ounce; alcohol, 3 ounces; aqua ammonia, 2 ounces; Venice turpentine, 8 ounces. Mix. Apply to the edge of the hair and all over the hoof once a day for ten days, then twice a week for a short time.

No. 3.—Rosin, 4 ounces; lard, 8 ounces; heat them over a slow fire, then take off and add powdered verdigris, 1 ounce, and stir well to prevent its running over; when partly cool add 2 ounces spirits of turpentine. Apply to the hoof about one inch down from the hair.

Horse Liniments.

No. 1.—Oil spike, oil origanum, oil hemlock, oil wormwood, aqua ammonia, camphor gum, of each 2 ounces; olive oil, 4 ounces; alcohol, 1 quart. Mix. This is an excellent liniment for man or beast.

No. 2.—Oil origanum, oil amber, sweet oil, of each 1 ounce; oil spike, aqua ammonia and oil of turpentine, of each 2 ounces. Mix.

No. 3.—Linseed oil, 8 ounces; turpentine, 8 ounces; oil origanum, 4 ounces. Mix well. This is excellent for sprains and bruises, and is good as a general liniment.

No. 4.—Oil spike, 1 ounce; oil origanum, 2 ounces; alcohol, 16 ounces. Good for lameness resulting from almost any cause.

No. 5.—Take equal parts of alcohol, chloroform, aqua ammonia, Jamaica rum and water, and mix.

For Scratches and Grease Heel.

No. 1.—Balsam fir, 4 ounces; lard, 4 ounces. Stir, with a gentle heat, until thoroughly mixed. Wash the sores well with castile soap, and apply.

No. 2.—Sugar of lead, 2 ounces; borax, 1 ounce; sweet oil, 6 ounces. Mix, and apply twice daily, after washing with castile soap, and drying.

No. 3.—Tincture of myrrh, 2 ounces; glycerine, 4 ounces; tincture of arnica, 2 ounces. Mix thoroughly, and apply two or three times a day, after cleansing, as above, with castile soap.

No. 4.—Take ½ ounce of powdered verdigris and 1 pint of rum or proof spirits. Mix, and apply once or twice a day. This works nicely for grease heel or mud fever.

No. 5.—Take of oxide of zinc, 1 drachm; lard, 1 ounce; powdered gum benzoin, 10 grains; camphorated spirits, 1 drachm. Mix thoroughly, and rub on twice a week. Do not wash after the first application.

Cuts, Wounds and Sores.

No. 1.—Take of lard, 4 ounces; beeswax, 4 ounces; rosin, 2 ounces; carbolic acid, ¼ ounce. Mix the first three, and melt; then add the carbolic acid, stirring until cool. This is excellent for man as well as beast.

No. 2.—Tincture aloes, 1 ounce; tincture myrrh, ½ ounce; tincture opium, ½ ounce; water, 4 ounces. Mix, and apply night and morning.

No. 3.—Tincture opium, 2 ounces; tannin, ¼ ounce. Mix.

No. 4.—Carbolic acid, 1 ounce; soft water, 1 quart. Mix.

Sweeney.

No. 1.—Spanish flies, camphor gum and cayenne, of each 1 ounce; alcohol, 10 ounces; spirits turpentine, 6 ounces; oil origanum, 2 ounces. Mix.

No. 2.—Alcohol, 16 ounces; spirits turpentine, 10 ounces; muriate of ammonia, 1 ounce. Mix.

No. 3.—Alcohol, water, spirits turpentine and soft soap, of each 1 pint; salt, 6 ounces. Mix.

Poll Evil and Fistula.

No. 1.—Copperas, 1 drachm; blue vitriol, 2 drachms; common salt, 2 drachms; white vitriol, 1 drachm. Mix, and powder fine. Fill a goose-quill with the powder, and push it to the bottom of the pipe, having a stick in the top of the quill, so that you can push the powder out of the quill, leaving it at the bottom of the pipe; repeat again in about four days, and in two or three days from that time you can take hold of the pipe and remove it without trouble.

No. 2.—Tincture of opium, 1 drachm; potash, 2 drachms; water, 1 ounce. Mix, and, when dissolved, inject into the pipes with a small syringe, having cleansed the sore with soap-suds; repeat every two days until the pipes are completely destroyed.

No. 3.—Take a small piece of lunar caustic; place in the pipe, after being cleansed with soap-suds; then fill the hole with sweet oil.

Bots.

Take new milk, 2 quarts; syrup, 1 quart. Mix, and give the whole, and, in fifteen or twenty minutes after, give two quarts of warm, strong sage tea; half an hour after the tea, give one quart of raw linseed oil, or, if the oil can not be had, give lard instead.

Ointment for Horses.

Beeswax, 2 ounces; rosin, 3 ounces; lard, 4 ounces; carbolic acid, 1 drachm; honey, ½ ounce; melt all together and bring slowly to a boil; then remove from the fire, and add, slowly, 1 gill of spirits of turpentine, stirring all the time until cool. Used, with good success, for galls, cracked heels, flesh wounds or bruises.

Condition Powders.

No. 1.—Gentian, fenugreek, sulphur, saltpetre, cream of tartar, of each 2 ounces; resin, black antimony, of each 1 ounce; ginger, liquorice, 3 ounces each; cayenne, 1 ounce; pulverized and mixed thoroughly. Dose, 1 tablespoonful, once or twice a day, mixed with the food. Used, with good success, for coughs, colds, distemper, hide-bound, and nearly all diseases for which condition powders are given.

No. 2.—Fenugreek, 4 ounces; ginger, 6 ounces; anise, pulverized, 4 ounces; gentian, 2 ounces; black antimony, 2 ounces; hard wood ashes, 4 ounces. Mix all together. Excellent to give a horse an appetite.

No. 3.—Liquorice, 4 ounces; fenugreek, 4 ounces; elecampane, 4 ounces; blood root, 1 ounce; tartar emetic, ½ ounce; ginger and cayenne, each

1 ounce. Mix, and give a tablespoonful two or three times a day in the feed. One of the best condition powders for any cough, cold, distemper or epizoötic; also excellent for heaves. For heaves, one ounce of lobelia and camphor may be added.

Liniments for Horses.

No. 1.—Olive oil, 2 ounces; aqua ammonia, 1 ounce. Mix, and add 2 ounces oil origanum, 2 ounces spirits of turpentine, ½ ounce oil of worm wood, 1 pint of strongest alcohol. This liniment is excellent for any lameness, also good for spavins, ring-bones, curbs, etc., if used when they make their first appearance.

No. 2.—Oil of spike, 1 ounce; oil of origanum, 4 ounces; aqua ammonia, 2 ounces; tincture of cayenne pepper, 4 ounces; beef's gall, 1 gill; camphor gum, 1 ounce; alcohol, 1 pint. Mix. Used for the same purposes as No. 1.

No. 3.—Best vinegar, 1 quart; saltpetre, pulverized, 4 ounces; wormwood, 4 ounces. Mix, and steep in a dish well covered; strain and press the herbs. Valuable for bruises, swellings and sprains.

Saddle and Harness Galls, Bruises, etc.

No. 1.—Tincture of opium, 2 ounces; tannin, 2 drachms. Mix, and apply twice a day.

No. 2.—Take white lead and linseed oil, and mix as for paint, and apply two or three times a day. This is good for scratches, or any wounds on a horse.

Eyewater for Horses.

Sugar of lead, 1 drachm; tincture of opium, 2 drachms; soft water, 1 pint. Mix, and wash the eye two or three times a day.

Founder.

No. 1.—Vinegar, 3 pints; cayenne pepper, ½ drachm; tincture of aconite root, 15 drops. Mix, and boil down to one quart; when cool, give it as a drench. Blanket the horse well; after the horse has perspired for an hour or more, give one quart of raw linseed oil. This treatment will be found good for horses foundered by eating too much grain.

No. 2.—Some recommend for horses foundered on grain, to bleed about one gallon, then to drench the horse with one quart of raw linseed oil; after this to rub the fore legs well, and for a long time, with very warm water, having a little tincture of opium mixed with it. As the horse will not recover from loss of blood for a long time, it is usually better to adopt the treatment given in No. 1.

Anodyne Drenches.

No. 1.—Tincture of opium, 1 ounce; starch gruel, 1 quart. Mix.

No. 2.—Sweet spirits of nitre, 1 ounce; tincture of opium, 1 ounce; essence of peppermint, ¼ ounce; water, 1 pint. Mix.

No. 3.—Tincture of opium, 1 ounce; spirits of camphor, ½ ounce; anise, ½ ounce; sulphuric ether, 1 ounce; water, 1 pint. Mix.

Diabetes.

Sugar of lead, 10 grains; alum, 30 grains; catechu, 1 drachm; tincture of opium, ½ ounce; water, 1 pint. Mix.

Farcy and Glanders.

No. 1.—Iodide of potassium, 1¼ drachms; copperas, ½ drachm; ginger, 1 drachm; gentian, 2 drachms; powdered gum arabic and syrup to form a ball.

No. 2.—Calomel, ½ drachm; turpentine, ½ ounce; blue vitriol, 1 drachm; gum arabic and syrup to form a ball.

No 3.—One-half ounce sulphite of soda, 5 grains Spanish flies, powdered. Mix, and give at night in cut feed for several weeks; give at the same time, every morning and noon, 3 drachms powdered gentian, 2 drachms powdered blue vitriol; give the medicines for a long time; feed well. This is the best treatment that can be given for this disease.

Fever Balls.

No. 1.—Saltpetre, 2½ drachms; tartar emetic, ½ drachm; flaxseed meal, 1 ounce; camphor, ½ drachm; ginger, 2 drachms. Mix, and form into a ball. Repeat three or four times a day if necessary.

No. 2.—Tincture aconite, ten drops; tartar emetic, ¼ drachm; saltpetre, 1 drachm; ginger, 2 drachms; linseed meal, 1 ounce. Mix, and form into a ball. Repeat three or four times a day if necessary.

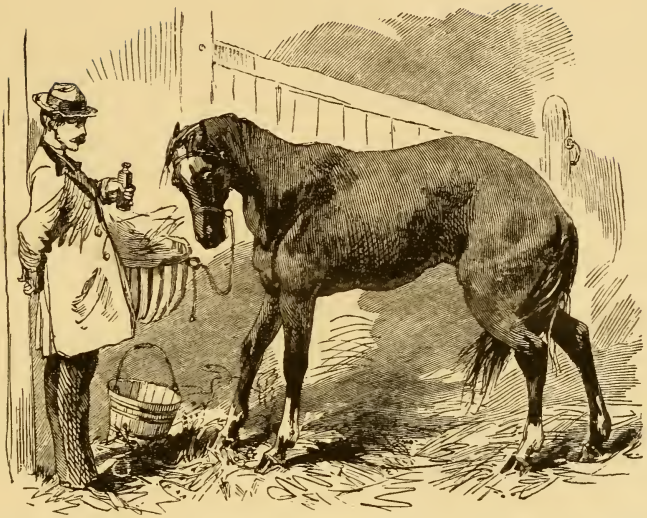
Diuretic and Tonic Balls.

Copperas, 1½ drachms; ginger, 1 drachm; gentian, 1 drachm; saltpetre, 3 drachms; rosin, ½ ounce; flaxseed meal, 1 ounce. Mix, and form into a ball.

Diuretic Balls.

No. 1.—Saltpetre, 3 drachms; rosin, 4 drachms; castile soap, 2 drachms; fenugreek, 3 drachms; flaxseed meal, 1 ounce. Mix, and form into a ball.

No. 2.—Oil of juniper, ½ drachm; rosin and saltpetre, each, 2 drachms, camphor, ½ drachm; castile soap, 1 ounce; flaxseed meal, 1 ounce. Mix, and form into a ball.



THIS ENGRAVING ILLUSTRATES THE FOLLY OF A HEAVY MAN RIDING A COLT HARD ALL DAY. BE MERCIFUL TO YOUR BEAST.

Cordial Balls.

No. 1.—Anise, powdered, ½ ounce; ginger, 1 drachm; gentian, 1 drachm; fenugreek, 2 drachms. Mix.

No. 2.—Caraway and ginger, each, 2 drachms; anise, gentian and fenugreek, each, 1 ounce. Mix.

No. 3.—Camphor, 1 drachm; anise, 3 drachms; tincture of opium, 1 ounce; powdered extract of liquorice, 3 drachms; flaxseed meal, 1 ounce. Mix.

Astringent and Cordial.

No. 1.—Opium, 12 grains; camphor, ½ drachm; catechu, 1 drachm. Mix.

No. 2.—Opium, 10 grains; camphor, 1 drachm; ginger, 2 drachms; castile soap, 2 drachms; anise, 3 drachms; liquorice, 2 drachms. Mix.

Alterative and Laxative Balls.

No. 1.—Linseed meal, 1 ounce; aloes, ½ ounce; castile soap, ½ ounce. Mix.

No. 2.—Ginger, 1 drachm; castile soap, 2 drachms; Barbadoes aloes, pulverized, 6 drachms; flaxseed meal, 1 ounce. Mix.

Tonic Ball.

Ginger, 2 drachms; gentian, 1 drachm; Peruvian bark, ½ ounce; fenugreek, ½ ounce. Mix, and form a ball.

Diuretics.

Take of balsam copaiba, 2 ounces; sweet spirits of nitre, 3 ounces; spirits of turpentine, 2 ounces; oil of juniper, 2 ounces; tincture of camphor, 2 ounces. Mix; shake the bottle before pouring the medicine. Dose for adult horse: Two tablespoonfuls in a pint of milk, repeated every four to six hours, if necessary. This is a reliable preparation for kidney difficulties.

Cough Mixtures.

No. 1.—Oil of tar, given as directed for treatment of heaves, is one of the best remedies for nearly all coughs.

No. 2.—Take of alcohol, ½ pint; balsam of fir, 2 ounces. Mix well, and add all the tar it will cut. Shake well before using. Dose, from one to two teaspoonfuls two or three times a day.

Farcy.

Nitrate of potash, 4 ounces; black antimony, 2 ounces; sulphite of soda, 1 ounce; elecampane, 2 ounces. Mix. Dose, one tablespoonful once or twice a day.

Nasal Gleet.

No. 1.—Copperas, 2 ounces; pulverized gentian, 3 ounces; elecampane, 1 ounce; linseed meal, 3 ounces. Mix, and give from half to one tablespoonful twice a day.

No. 2.—Aloes, 6 ounces; pulverized nux vomica, 3 drachms; flaxseed meal, 4 ounces. Make into eight powders, and give one or two each day.

Cracked Heels.

Tar, 8 ounces; beeswax, 1 ounce; rosin, 1 ounce; alum, 1 ounce; tallow, 1 ounce; sulphate of iron, 1 ounce; carbolic acid, 1 drachm. Mix, and boil over a slow fire. Skim off the filth, and add 2 ounces of the scrapings of sweet elder.

Thrush.

No. 1.—Wash the feet well, with castile soap and water, and sprinkle a small quantity of pulverized blue vitriol in the cleft; then fill up all the cavities with cotton, press it in so as to keep out all dirt, and repeat as often as necessary until the cure is complete.

No. 2.—Blue vitriol and copperas, of each 1 ounce; burnt alum, 2 ounces; white vitriol, ½ ounce. Mix.

Water Farcy.

No. 1.—Saltpetre, 2 ounces; copperas, 2 ounces; ginger, 1 ounce; fenugreek, 2 ounces; anise, ½ ounce; gentian, 1 ounce. Mix, and divide into eight powders; give two or three each day.

No. 2.—Gentian, 1 ounce; ginger, ½ ounce; anise, 1 ounce; elecampane, 2 ounces; blue vitriol, 1 ounce; flaxseed meal, 2 ounces; saltpetre, 2 ounces. Mix, and divide into eight powders. Moderate daily exercise and rubbing the limbs are useful.

Healing Preparations.

No. 1.—Carbolic acid, 1 ounce; soft water, 2 pints. Mix.

No. 2.—White vitriol, 1 ounce; soft water, 2 pints. Mix.

No. 3.—Pulverized camphor, 1 drachm; prepared chalk, 6 drachms; burnt alum, 4 drachms. Mix. Sprinkle over the sore.

No. 4.—Tincture of opium, 1 ounce; tannin, 1 drachm. Mix, and shake well before using. Excellent for galls of collar, saddle, or in fact for any purpose requiring a healing astringent.

For Galled Back or Shoulders.

Tincture of arnica, 1 ounce; vinegar, 6 ounces; brandy, 4 ounces; sal ammoniac, 2 ounces; soft water, 1 pint. Mix, and bathe with it often.

For Unhealthy Ulcers.

Nitric acid, 1 ounce; blue vitriol, 3 ounces; soft water, 15 ounces. Mix.

For Fresh Wounds.

Copperas, 2 drachms; white vitriol, 3 drachms; gunpowder, 2 drachms; boiling soft water, 2 quarts. Mix. When cool it is ready for use.

Healing Mixture.

Cosmoline, 5 ounces; carbolic acid, 1 drachm. Mix. This is one of the very best of mixtures for any sore, especially for such cases as are inclined not to heal readily.

To Cure Mange.

Oil tar, 1 ounce; lac sulphur, 1½ ounces; whale oil, 2 ounces. Mix. Rub a little on the skin wherever the disease appears, and continue, daily, for a week, and then wash off with castile soap and warm water.

Healing Mixture for Cuts.

Balsam copaiba, 2 ounces; tincture of myrrh, 3 ounces. Mix. This is a good healing mixture.

Sore Lips.

The lips become sore frequently at the angles of the mouth, from bruising with the bit. They can be cured by applying the following mixture:

Tincture of myrrh, 2 ounces; tincture of aloes, 1 ounce; tincture of opium, ½ ounce. Mix, and apply three or four times a day.

For Sore Mouth and Lips.

Borax, 1 ounce; tannin, ¼ ounce; glycerine, 8 ounces. Mix, and apply two or three times a day, with a swab.

For Sprains, etc.

Hog's lard and spirits of turpentine. Mix, and place in the hot sunshine for four or five days. Apply four or five times a week.

Eye Water.

White vitriol and saltpetre, of each 1 scruple; pure soft water, 8 ounces. Mix. This should be applied to the inflamed lids three or four times a day, and if the inflammation does not lessen in one or two days, it may be injected directly into the eye.

The writer has used this for his own eyes, reduced half with water, and dropped directly into the eye, which would cause the eye to smart considerably for about five minutes, when he would bathe the eye with cold water for a few minutes, and, by repeating this three or four times a day, it has given the very best of satisfaction.

It does nicely, many times, to just close the eye and bathe the outside freely.

For Poll Evil, Fistula, or any Indolent Ulcer.

Fill the sore to the bottom with ashes from burnt corn cobs; repeat two or three times, if necessary, or until a cure is effected.

For Colic.

Take of gum myrrh, ¼ ounce; gum camphor, 1 ounce; powdered gum guaiac, 1 ounce; cayenne, 1 ounce; sassafras bark, powdered, 1 ounce; spirits turpentine, 1 ounce; oil origanum, ¼ ounce; oil hemlock, ½ ounce; pulverized opium, ½ ounce; strongest alcohol, 2 quarts. Mix all together, shake often for eight or ten days, and filter or strain through flannel. Dose, from one to three tablespoonfuls, according to the severity of the case; give in a pint of milk.

We never have known the above remedy to fail of giving relief when given for colic, in horses. In many cases where it has been used it has

given immediate relief, even though various other remedies had failed of giving any relief.

It makes one of the very best of Pain Killers for family use, and we advise all to keep it on hand.

For Flesh Wounds.

To prevent inflammation or tendency to sloughing or mortification, take 1 pound saltpetre, 2 gallons water, 3 pints proof spirits; mix, and inject into the wound with a syringe three times a day until it heals. In treating deep wounds or those of a dangerous character, especially if the animal is inclined to be fat, give a dose of physic, feed bran, carrots, etc. No grain should be fed, and grass is more desirable than hay. If grass is fed freely, physic is not necessary.

For Removing Enlargements, etc.

Oil spike, 1 ounce; camphor, 1 ounce; oil origanum, 2 ounces; oil amber, 1 ounce; spirits turpentine, 2 ounces. Rub on the mixture thoroughly, two or three times a week.

For Bruises, Cuts, etc., on Horse or Man.

Tincture arnica, 1 ounce; sassafras oil, ½ ounce; laudanum, 1 ounce. Mix. Shake well before using. Bandage lightly, and keep wet with the mixture.

Quarter Crack.

The best way to cure quarter crack is to open the heel on that side between bar and frog, cutting down pretty well, (not sufficient to cause bleeding), until the quarter will give freely; then put on a shoe that will expand the heel. It is also necessary in this case that the inner heel should be opened or spread, as the hoof is simply too small for the foot; if this is properly done, the point is directly reached. Some recommend, in addition to this, burning, with a hot iron, a crease across at the upper edge of hoof. If this is done properly, the hoof will not split any more. The hoof may now be more rapidly grown if desired. Opening the foot and the shoe is the point of success.

Quittor.

Corrosive sublimate, ¼ ounce; muriatic acid, 20 drops; soft water, 2 ounces. Mix the last two and shake well, then add the first.

Inject a little with a glass syringe once or twice, being careful to inject to the bottom. Warm poultices, used for several days, generally work well.

To Grow Hair.

Mix sweet oil, 1 pint; sulphur, 3 ounces. Shake well, and rub into the dock twice a week.

For Worms.

Calomel, 1 drachm; tartar emetic, ½ drachm; linseed meal, 1 ounce; fenugreek, 1 ounce. Mix, and give in feed at night; repeat the dose two or three times, and follow with one and a half pints of raw linseed oil, about six hours after the last powder has been given.

Grease Heel.

Chloride of zinc, 1½ drachms; water, 10 ounces; glycerine, 8 ounces. Mix. If there is much discharge, apply a poultice for several hours, followed by application of the above, after cleansing well with soft water and castile soap. The following powders should be given at the same time in the feed, every night, for a week or two: Bicarbonate of soda, 1 ounce; arsenic, 1 drachm; iodide of iron, ½ ounce; fenugreek, 2 ounces; ginger, 2 ounces; elecampane, 1 ounce. Mix thoroughly, and divide into twelve powders.

For Distemper.

Hops, 2 ounces; carbolic acid, 30 drops; boiling water, 2 gallons. Mix the hops and carbolic acid with the boiling water, and compel the animal to inhale the steam for fifteen or twenty minutes at a time; repeat three times a day. Apply a strong mustard paste to the throat, and place a warm poultice over the paste. Feed warm mashes and boiled vegetables; keep the stable comfortably warm and the air pure. Give the following powders once a day: Powdered Peruvian bark, 2 ounces; powdered gentian, 1 ounce; powdered copperas, 1 ounce. Mix, and divide into eight powders.

Thrush.

Take white vitriol, 2 ounces; soft water, 8 ounces. Mix, and apply to the diseased surface, after the ragged parts have been cut away and thoroughly cleansed. Pack the cavities with cotton batting, so as to keep out all dirt.

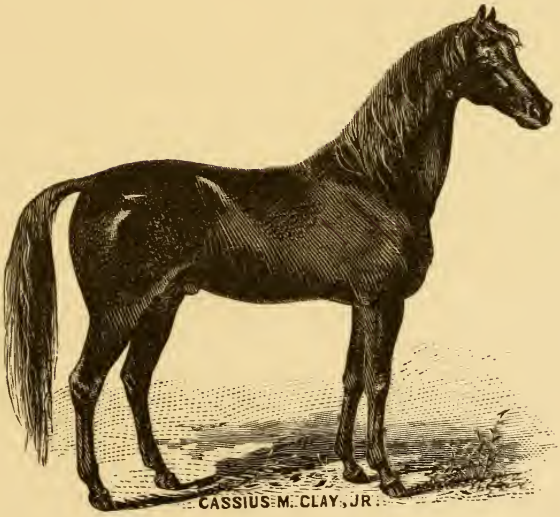
For Ringworm.

Apply mercurial ointment three or four times a week

For Brittle and Contracted Hoofs.

Take of castor oil, Barbadoes tar and soft soap, equal parts of each; melt all together and stir while cooling, and apply a little to the hoof three or four times a week.

TO HORSE OWNERS.



All must admit that we live in an age of improvements, and that we enjoy what our forefathers never even dreamed of—in the fast and easy transportation, rapid communication from continent to continent, and the use of the hundreds of labor-saving machines; and yet before or even when these great discoveries were first made known to the public, how many there were (like Thomas) who doubted. But "time will prove all things," and so it has been with all these inventions which were once said to be impossibilities, for now we know them to be of the great value which their originators claimed for them.

In the year 1875 it was claimed by the publisher of this book, that he had discovered a combination of remedies which would cure bone spavins and remove the enlargement without blistering or causing any sore. Like

all other discoveries, this too was scouted at when first announced to the public, as might naturally have been expected, by those who knew most about the usual manner of treating this difficulty, and by those who had tried faithfully everything they could learn of ever being used, but only meeting with disappointment with each trial of the vaunted remedy. This class (being *horsemen*) knew that a bone spavin made an otherwise valuable horse of but little worth, for they knew how frequently the most powerful remedies had been used, such as blisters, which were so powerful as to destroy the tissues, and also the red hot iron, which was worse, if possible, and still the horse left as bad *or worse* than before anything had been used—therefore, after so many disappointments of this kind, it would be very natural for men having such an experience, to say it was impossible to cure a spavin, and remove the bunch, and to do it with a remedy so mild as not to blister. But, as we said before, "time will prove all things," and so it has been with Kendall's Spavin Cure, and those who were the first to condemn it are now the loudest in its praise; (I mean those who were *horsemen*, and who knew that if a cure was to be accomplished, there was something needed more than to simply make a few hasty and perhaps faulty applications and therefore would use the Spavin Cure with patience according to directions).

The time was, in the practice of medicine, when about every patient was subjected to the rash treatment of bleeding and salivation from the indiscriminate use of calomel, but time has proved these plans of treatment to be more fruitful of damage than otherwise, so they have become among the things of the past. A similar reform is now taking place in the treatment of the horse, the most useful animal ever created; and horsemen are beginning to learn that a horse needs more humane treatment than he has received in the past, and the cases are *very rare* which require the powerful remedies that have been in use; and I think we can safely say that those cases *never occur* which require the use of the red hot iron, and the men are very few that would allow this barbarous treatment to be practiced upon their own person; and we ask why any man should allow this noble animal to be subjected to any treatment that he would not submit to upon his own person? Could the horse, like Balaam's animal, be for a moment endowed with the power of speech, he would say—do not subject me to any treatment which you consider too cruel for yourself; for we, like you, have been created with nerves of sensibility, so that pain is as hard for us to endure as for you, and therefore we ask that you will always have mercy upon us (as a merciful man should do), and consider, before treating us, (or neglecting to do so), whether it is doing just as you would be done by.

It might be of interest to some, for us to state here how Kendall's Spavin Cure happened to be discovered.

Our Experience with Bone Spavin.

The proprietor having a horse which he prized, for her goodness and gentleness, and which in some way became spavined, was under the necessity of resorting to the popular remedies in use at that time, for the treatment of the spavin; after a few weeks' treatment the outlook seemed to be rather discouraging; but as we had had experience as a practicing physician, and also the benefit of all the receipts which were said to be cures—having been in the drug business for several years, and filled the receipts from the various horsemen in our vicinity—we felt that our experience had been such that we were certainly equal to the task, if any one was, and so we continued, first with this liniment, and then with the other, until we had gone through with the whole catalogue of the (so called) "*sure cures.*" We took counsel of the various horsemen who were quite sure their receipts would be just *the* thing, but when informed that all this and more too had been used we received but little consolation. As the horse was no better, and several weeks had elapsed since we began the treatment, our faith in the power of any remedy to even stop the lameness (to say nothing of removing the enlargement) was very weak; but still we were finally persuaded that a thorough use of blisters might cure, and it was our only hope, and we therefore proceeded to torment the poor animal by applying blisters about every two weeks, and giving the horse rest, until six blisters had been applied, during which time the horse was allowed to remain (nearly all summer) in the barn; and as the horse was no better, that we could perceive, it will be easy for any one to imagine our feelings in regard to the power of *any remedy* to cure bone spavin, and then we, like many others, were *very positive in our opinion* that there was nothing which would cure a bone spavin, and finally stopped all treatment.

About six weeks after we had stopped all treatment, we decided to give the case another trial, for it seemed to us that there was something that would effect a cure if we could only get the right thing. Instead of using the remedies which everybody said were sure cures, we began to reason about the matter, and it occurred to us that if we had been treating a human being we should have treated him in a more humane manner, and therefore we compounded a mixture which was entirely different from anything we had ever heard of being used, and again began to treat the horse, and, to our great surprise, in a short time (about two weeks) the lameness all subsided; and, by continuing the treatment awhile after the lameness had subsided, the enlargement was entirely removed. I could hardly realize what a wonderful cure had finally been accomplished, but after preparing the same mixture for a great many cases, without hearing of its failing to cure in a single case, I was then fully satisfied of the *great worth of this remedy to horse owners*, and began to put it up for the public; and since that time the cures

which it has effected have been almost innumerable, and now those who are most capable of judging of its merits pronounce it to be the best remedy for the purposes for which it is prepared that they have ever known to be used.

We therefore offer the *Kendall's Spavin Cure* to the public with perfect confidence believing that in nearly if not every case in which a man might *reasonably* expect a cure, if he uses the Spavin Cure thoroughly and patiently, according to the directions, he will effect a cure. By the words "thoroughly and patiently" used above we mean to use as directed on bottle, by *rubbing down to the skin well*, as what remains on the hair has no effect, and by applying over the size of the whole of the enlargement; but there is no good reason for applying all over the leg because one desires to be thorough and cover the whole of the bunch, for what is applied to the space outside of the enlargement is only wasted—but we frequently find parties who apply it almost indiscriminately to the whole of the hock joint, when a space the size of a cent, perhaps, would be all that was necessary, and therefore the bottle of Spavin Cure is used, or rather wasted, in a very few days, and the man finds his horse no better, and drops the use of the Cure, and perhaps condemns it, when he has not given it the slightest fair chance to effect a cure. By the word "patiently" we would be understood to mean, to apply it according to directions, for a long time, if *necessary*, for no difficulty of so serious a nature as spavin is, can be removed by *any* remedy in only a few days; and if any man would stop to consider he might know that it would be impossible. We might occupy many pages in relating our experience and in giving full directions for the use of Kendall's Spavin Cure, but will not add more here except to say, *use good common sense in applying it, and in the use of the horse.*

Please look over the following testimonials, many of which are from the most prominent gentlemen, and horse owners, in the country. Also see treatment given for bone spavin, etc.

On Human Flesh.

Although Kendall's Spavin Cure was not originally designed to be used on human flesh, yet it has been found to work wonderful cures in thousands of cases, and now we have no hesitancy in stating that it is *the best liniment* for external use on human flesh that we have ever known to be used. It can be used full strength, with perfect safety, for rheumatism or any lameness; also, for bruises, cuts, corns, frost-bites, burns, sprains, or for any purpose for which an external liniment is used. See testimonials.

What some of our Patrons say of it.

Any one doubting the genuineness of any of the following recommendations is earnestly requested to correspond with the parties themselves, and if a three-cent stamp is enclosed it will be quite sure to bring a reply.

Office of G. W. VOORHIS, Proprietor Hamtramck Driving Park and Park House,
DETROIT, MICH., April 12, 1881.

B. J. KENDALL & Co.—Gents: The "Treatise on the Horse and his Diseases" you sent me is at hand, and I think it is a first-class book. Your Kendall's Spavin Cure I have used for the last three years, and I think it is the best medicine I ever saw for spavin and splint, and will freely recommend it to my friends.

Yours respectfully,
G. W. VOORHIS.

Office of C. M. Moseman & Bro., Manufacturers of and Dealers in Harness, Horse Clothing, etc.,
128 Chambers St., NEW YORK CITY, Jan. 22, 1881.

DR. B. J. KENDALL—Dear Sir: We take great pleasure in stating to you that the sale of your Kendall's Spavin Cure has been, without exception, the most satisfactory of any horse liniment we have ever kept in our stock. We have sold it to many of the best horse men in our city, and they all tell us freely that it does the work to their entire satisfaction. Capt. Rynders, owner of "Aberdeen," told us to-day it was worth $5 per bottle, and if it could not be got for less he would give it. Trusting that every horse owner will find out its good qualities, we are

Yours truly,
C. M. MOSEMAN & BRO.

From Col. L. T. FOSTER.

YOUNGSTOWN, OHIO, May 10, 1881.

DR. B. J. KENDALL & Co.—Gents: I had a very valuable Hambletonian colt which I prized very highly; he had a large bone spavin on one joint and a small one on the other, which made him very lame; I had him under the charge of two veterinary surgeons, who failed to cure him. I was one day reading the advertisement of Kendall's Spavin Cure in the Chicago Express. I determined at once to try it, and got our druggists here to send for it; they ordered three bottles; I took them all and thought I would give it a thorough trial. I used it according to directions, and the fourth day the colt ceased to be lame, and the lumps have disappeared. I used but one bottle, and the colt's limbs are as free from lumps and as smooth as any horse in the State. He is entirely cured. The cure was so remarkable that I let two of my neighbors have the remaining two bottles, and they are now using it.

Very respectfully,
L. T. FOSTER.

From a Prominent Physician.

WASHINGTONVILLE, OHIO, June 17, 1880.

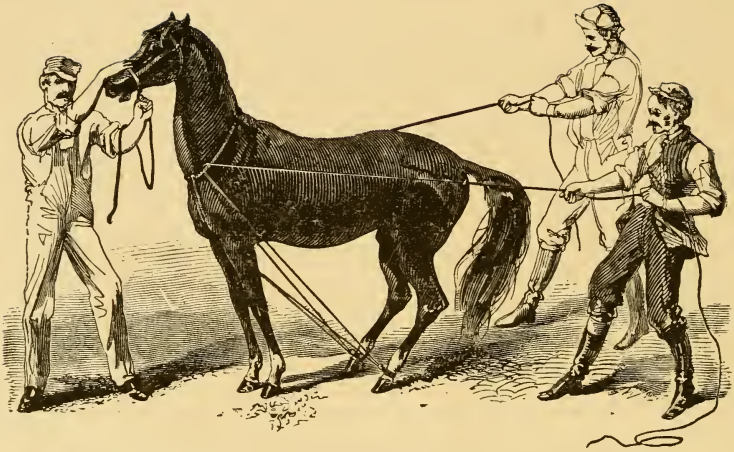
DR. B. J. KENDALL & Co.—Gents: Reading your advertisement in Turf, Field and Farm, of your Kendall's Spavin Cure, and having a valuable and speedy horse which had been lame from spavin for eighteen months, I sent to you for a bottle by express, which in six weeks removed all lameness and enlargement and a large splint from another horse, and both horses are to-day as sound as colts. The one bottle was worth to me one hundred dollars.

Respectfully yours,
H. A. BERTOLETT, M. D.

COLOMA, MICH., Nov. 4, 1880.

MESSRS. KENDALL & Co.—Sirs: I have used six bottles of your Kendall's Spavin Cure and cured as many spavins (well marked) on different horses. I consider it a remedy never equaled for sprains or ring-bones.

Yours,
A. H. SUTTON.



THE BEST AND MOST APPROVED METHOD OF CASTING A HORSE FOR OPERATION.

GRAVESEND, L. I., Jan. 31, 1881.

MESSRS. KENDALL & CO.—Sirs: This is to certify that I know that Dr. Kendall's Spavin Cure is used by all the best trainers of runners and trotters in the United States. My business as a sporting reporter for all races in the different States brings me in daily contact with owners and trainers of the best horses in the land. The majority of these have used the Kendall's Spavin Cure with wonderful results. As a stable liniment it has no superior.

HENRY C. DITMAS,
Sporting Reporter.

CONCORD, N. H., Jan. 2, 1880.

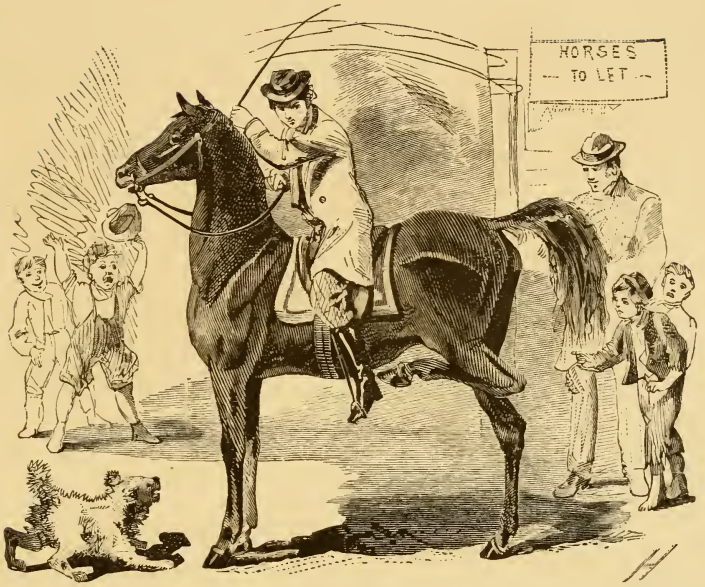
B. J. KENDALL & Co.—Gentlemen: We have a beautiful roan mare that was given to us on account of a spavin on her leg, which made her dead lame. We took off her shoes and allowed her to run in the barn yard in the fall of the year, applying "Kendall's Spavin Cure" according to directions. We did not use her for a month. She was entirely cured, *and the bunch completely removed*, and has never been lame since. We state what we know to be a fact.

Respectfully yours,
UNDERHILL & KITTREDGE
Apothecaries.

From the Oneonta Press, New York.

ONEONTA, N. Y., Jan. 6, 1881.

Early last summer Messrs. B. J. Kendall & Co., of Enosburgh Falls, Vt., made a contract with the publishers of the Press for a half-column advertisement, setting forth the merits of Kendall's Spavin Cure, for one year. At the same time we secured from the firm a quantity of books entitled Dr. Kendall's Treatise on the Horse and his Diseases, which we are now giving to advance paying subscribers to the Press as a premium. About the time the advertisement first appeared in this paper, Mr. P. G. Schermerhorn, who resides near Colliers, had a spavined horse. He read the advertisement and concluded to test the efficacy of the remedy, although his friends laughed at his credulity. He bought a bottle of Kendall's Spavin Cure and commenced using it on the horse in accordance with the directions, and he informed us this week that it effected such a complete cure that an expert horseman who examined the animal recently, could find no trace of the spavin or the place where it had been located. Mr. Schermerhorn has since secured a copy of Kendall's Treatise on the Horse and his Diseases, which he prizes very highly, and would be loath to part with at any price, provided he could not obtain another copy. So much for advertising reliable articles.



IF YOU DO NOT WANT TWO FEET IN THE SAME STIRRUP WHEN YOU TAKE YOUR MORNING RIDE, DO NOT BUY A HORSE WITH THE STRING-HALT, AS THE DISEASE IS INCURABLE.

WINTHROP, IOWA, Nov. 23, 1880.

DR. B. J. KENDALL & Co.—Gents: Enclosed please find twenty-five cents for your Treatise on the Horse and his Diseases. I have been using Kendall's Spavin Cure on one of my horses for bone spavin. One bottle entirely cured the lameness and removed most all the bunch.

Yours respectfully,
LEEROY M. GRAHAM.

Office of Peter Hayden & Co., Nos. 45 & 47 Lake St., CHICAGO, ILL., March 16, 1878.

DR. B. J. KENDALL—Dear Sir: As to your "Kendall's Spavin Cure," we will most freely say that in our sales of same we have ever found that it brings back the good words of the user, and we have letters on file, too many to re-write, which speak in the highest terms of your "Spavin Cure." We have no fear in always recommending it, with our experience and belief of its virtues.

Respectfully,
P. HAYDEN & CO.

P. Hayden, Wm. B. Hayden, C. H. Allen, Albert Hayden.

FREMONT, OHIO, Jan. 25, 1881.

DR. B. J. KENDALL & Co.—Gents: I think it my duty to render you my thanks for benefits and profits which I have derived from your invaluable and far-famed Spavin Cure. My cousin and I had a valuable stallion worth $4,000, which had a very bad spavin, and was pronounced by four eminent veterinary surgeons beyond any cure, and that the horse was done for ever. As a last resort I advised my cousin to try a bottle of Kendall's Spavin Cure. It had a magical effect, the third bottle cured it, and the horse is as well as ever. Dr. Dick, of Edinburgh, the eminent veterinary surgeon, was an uncle of mine, and I take great interest in assisting his profession.

Yours truly,
JAMES A. WILSON,
Civil Engineer.

ZIONSVILLE, IND., Nov. 3, 1880.

DR. B. J. KENDALL & Co.—Gents: I have your valuable Treatise on the Horse and his Diseases, and your Kendall's Spavin Cure. My horses have the epizoötic; one of them could not swallow for two days. I applied your Kendall's Spavin Cure twice to her throat and it gave most instant relief. I think I could sell 1,000 of your books. Please give prices to agents.

Yours truly,
PETER BOWEN.

REPUBLICAN CITY, NEB., March 31, 1880.

Dr B. J. KENDALL & Co.—Sirs: I tried your Kendall's Spavin Cure, and it had the desired effect. It cured the spavin, which other treatments failed to do. I did not use quite one bottle of your liniment. After the spavin was removed I drove the horse and his mate over 500 miles, from Linn County, Iowa, to Harlan County, Nebraska, with a load of about 2,000 pounds, and made the trip in four weeks. Please send me your Treatise on the Horse; price, 25 cents.

Respectfully yours,
JAMES YELLENIC.

DIXFIELD, MAINE, Oct. 20, 1880.

DR. B. J. KENDALL & Co.—Gents: Please find enclosed twenty-five cents for Revised Edition of your Horse Book. I have tried your Kendall's Spavin Cure for curb, and it has done all you claim for it. By using one-half bottle it entirely cured the lameness and removed the bunch.

Yours truly,
FRANK STANLEY.

PERSEVERANCE WILL TELL.

STOUGHTON, MASS., March 16, 1880.

B. J. KENDALL & Co.—Gents: In justice to you and myself, I think I ought to let you know that I have removed two BONE SPAVINS with "Kendall's Spavin Cure," one very large one; don't know how long the spavin had been there. I have owned the horse eight months. It took me four months to take the large one off, and two for the small one. I have used ten bottles. The horse is entirely well, not at all stiff, and no bunch to be seen or felt. This is a wonderful medicine. It is a new thing here, but if it does for all what it has done for me its sale will be very great.

Respectfully yours,
CHAS. E. PARKER.

PENTWATER, March 28, 1881.

DR. B. J. KENDALL & Co., Enosburgh Falls, Vt.—Gentlemen: I have used your Kendall's Spavin Cure in a great many cases of puffed hock, bog spavin, thoroughpin, and other blemishes on horses, and it has proved a success with me in every instance. I can cheerfully recommend it as one of the best absorbents I ever used; no farmer or horse breeder should be without it.

Respectfully yours,
SAMUEL A. BROWNE,
Treasurer of Pentwater Lumber Co.

LOS ANGELES, CAL., P. O. Box 1007, Feb. 26, 1881.

DR. B. J. KENDALL & Co.—Dear Sir: Having used your Kendall's Spavin Cure, I find it the best remedy for horses that has ever been used on this coast. I have a fine colt that was kicked last fall on the point of the shoulder, and for three months had no use of his leg, and by using two bottles of your Kendall's Spavin Cure he is entirely cured. Please send one of your Horse books by mail for the enclosed twenty-five cents.

Yours truly, C. H. THAYER.

WILTON, MINN., Jan. 11, 1881.

B. J. KENDALL & Co.—Gents: Having got a Horse book of you by mail a year ago, the contents of which persuaded me to try Kendall's Spavin Cure on the hind leg of one of my horses, which was badly swollen and could not be reduced by any other remedy, I got two bottles of Kendall's Spavin Cure, of Preston and Ludduth, druggists, of Waseca, which completely cured my horse. About five years ago I had a three-year old colt sweenied very bad. I used your remedy as given in your book without roweling, and I must say to your credit that the colt is entirely cured, which is a surprise not only to myself, but also to my neighbors. You sent me the book for the trifling sum of twenty-five cents, and if I could not get another like it I would not take twenty-five dollars for it.

Yours truly,
GEO. MATHEWS.

14 Custom House St., Boston, Mass., Dec. 8, 1879.

B. J. Kendall & Co.—Gentlemen: This is to certify that I have a valuable stock horse which became almost worthless from a spavin, and that by using your Spavin Cure (one and a half bottles) he is free from all lameness and can trot a mile in 2:20 to-day. I have also used it successfully on the cords of the legs for sprung knees, and it is with pleasure that I can testify to the great merit of your most valuable medicine.

Yours respectfully,
JOSEPH HALE,
Stable keeper.

Office U. S. Marshall, Western Dist. of Michigan, Kalamazoo, April 15, 1878.

B. J. Kendall, Enosburgh Falls, Vt.—Dear Sir: I received the two bottles of your Kendall's Spavin Cure forwarded by express in January last. I am happy to state that it performed all your advertisement called for. In three weeks after I commenced using it the spavin was entirely removed, and a valuable horse restored to usefulness.

Very truly yours,
JOHN PARKER.

Akron, Ohio, Dec. 22, 1879.

B. J. Kendall & Co.—Gents: I can not recommend "Kendall's Spavin Cure" too highly. I have a friend who owns a valuable horse which became useless and worthless by the appearance of a very bad spavin. He tried every known remedy and gave up, thinking the spavin was incurable. I persuaded him to try your Spavin Cure, and, after using it according to directions, to use his own language, "It knocked the spavin higher than a kite," and a valuable horse was saved and restored to usefulness. I am now selling your book, "A Treatise on the Horse and his Diseases," and am meeting with great success.

Yours, etc.,
J. J. WRIGHT.

Maple Grove Farm, Eddyville, N. Y., Aug. 23, 1879.

B. J. Kendall, M. D.—Dear Sir: I have been using Kendall's Spavin Cure on a valuable stallion that I own. He kicked through a door and got his foot hung, taking out a piece of skin one and one-half by three inches, which left a fearful wound, and I thought he was ruined for life. After a long time I got it healed, leaving a bunch or callus as large as a large ring-bone. I have used one and one-half bottles of Kendall's Spavin Cure, and the bunch is nearly all gone. I can not say too much for the Spavin Cure, for it has done for me what I supposed was out of the power of man to do, in removing the bunch. I am a breeder of Ayrshire cattle, Leicester sheep, Berkshire hogs and Percheron horses, and unless I am extraordinarily lucky will want to use more or less of the Spavin Cure every week. Send me one-half dozen bottles by express. Yours truly.

S. N. DELAP.

The following letter was written to our agent in Louisville, Ky., by the owner of the stage route from Lebanon, Ky., to Campbellsville, who is well known throughout the State.

Campbellsville, Ky., Jan. 30, 1878.

J. W. Morrill & Co., Louisville, Ky.—Gents: The "Kendall's Spavin Cure" sent me some time ago has proved invaluable in all cases for which I used it: sprains, sore back, galled shoulders, windgalls and scratches. Fortunately I did not have any stock at the time with spavin.

Yours respectfully,
GEORGE BORDERS.

Meredith Village, N. H., Feb. 17, 1879.

Dr. B. J. Kendall & Co.—Dear Sirs: The horse I used your Spavin Cure on had a splint as large as a hen's egg, and it had been there about a year, and kept growing larger. I used one bottle of your Spavin Cure on it, which took it nearly all off. I then used a half bottle more and it took it entirely off, so that the leg was as smooth as the other. It was worth $100 to me, and I therefore feel very grateful to you. Please send me one-half dozen of your Spavin Cure, "C. O. D."

Yours with respect,
JOHN C. TOWLE.

Lawrence, Mass., Feb. 27, 1879.

B. J. Kendall—Dear Sir: Your "Kendall's Spavin Cure" has entirely cured my horse of a very bad bone spavin.

Yours truly,
G. B. HANCHETT.

ALEXANDER, N. Y., Jan. 2, 1880.

B. J. KENDALL & Co.,—Gentlemen: I have used and sold "Kendall's Spavin Cure" for a number of years with great success. It is a sure cure for spavins and ring-bones, when used according to directi ns. One of my neighbors had a nice young horse that had two bad ring-bones, which made him very lame. He used four bottles of your Spavin Cure, *which took off the bunches completely and cured him of his lameness entirely.* All those who have used it, around here, think there is nothing like it. Firmly believing it is by far the best horse liniment ever placed before the public, I remain

Yours, etc.,
C. W. VANDE BOGART,
Breeder of blooded horses, and dealer in horses and trotters,
Alexander, Genesee County, N. Y.

WADDINGTON, N. Y., Jan. 6, 1880.

B. J. KENDALL & Co.—Gentlemen: "Kendall's Spavin Cure" I consider as a truly beneficial remedy for the removal of spavins and any other enlargement on a l animals as well as horses. I had a very fine Jersey heifer which l st one-fourth (¼) of her bag with garget, and remained so until coming in the second time, wh n we applied your "Kendall's Spavin Cure," rubbing it thoroughly, and effected a complete cure. Believing it has no rival as a liniment, I cheerfully recommend its use.

Yours, etc.,
WALTER RUTHERFORD,
Importer and breeder of fancy cattle, Stock Farm, Waddington, N. Y.

CHILESBUUGH, KY., Feb. 20, 1879.

DR. B. J. KENDALL—Dear Sir: I have tried your Kendall's Spavin Cure on a chronic case of bone spavin which has been treated by two of the best doctors in the land. The case was fired twice, and I can safely say that your Spavin Cure did more good than anything which I ever tried. I believe it to be a good remedy for a great many difficulties. Ring-bone and bone spavin I am sure it will cure if taken in time. It is also good for scratches, grease heel, etc.

Yours respectfully,
T. B. MUIR.

GLOVER, VT., Feb. 13, 1879.

DR. B. J. KENDALL—Dear Sir: I used one bottle of your Kendall's Spavin Cure on a horse of ours and removed a spavin entirely; and one of my neighbors had a colt with a bad ring-bone, and by using two bottles of your Spavin Cure, he cured it entirely. It has given good satisfaction here.

Yours truly,
A. H. HALL.

BUFFALO, N. Y., Feb. 9, 1878.

This is to certify that I have used Kendall's Spavin Cure for a splint, and am happy to testify that it has fully cured it.

Yours respectfully,
WILLIAM SHARP,
Supt. of Thornton & Chester's stable.

HYDE PARK, VT., Nov. 8, 1877.

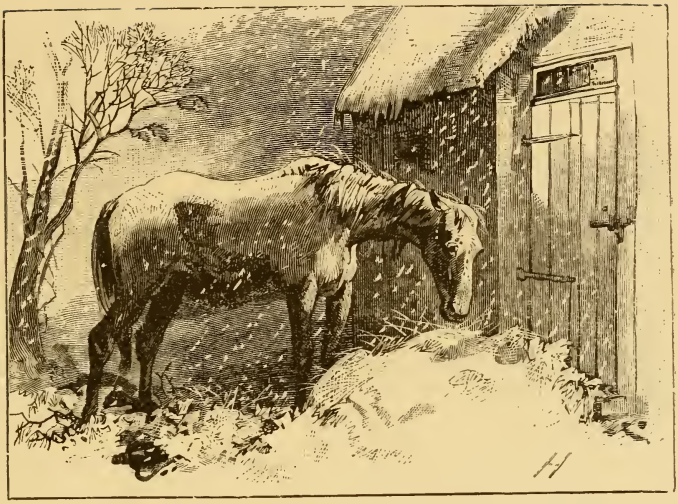
B. J. KENDALL & Co.—Dear Sir: I am no great friend to patent medicines, but do not hesitate to speak a good word for your Spavin Cure. Two years ago I bought a valuable three-year old colt in Canada, but before reaching home discovered that he was lame from a curb. The curb continued to enlarge, and would at times render the colt so lame that he could not be driven, and he hobbled very badly. I was induced to try your Spavin Cure, and with one bottle and a half took away the enlargement, and from that day to the present time he has not been lame. For curb, therefore, I do not hesitate to recommend people to try "Kendall's Spavin Cure."

Yours truly,
REV. O. S. BASFORD,
Editor of the Lamoille News.

LOWELL, MASS., MAY 25, 1878.

B. J. KENDALL—Dear Sir: Send us as usual three (3) dozen Kendall's Spavin Cure. We received your inquiry for references, and have delayed answering from time to time in hopes of getting one from a man who used ten bottles and completely cured a spavin of six years growth on a horse that after the cure trotted better than forty, and sold for $450. When he commenced to use the Cure the horse was dead lame and would not sell for $10. We did not know the man's name, and have not been able to find him since your letter.

Yours respectfully,
CROWELL & HARRISON,
Apothecaries, Lowell, Mass.



A SURE METHOD OF CONVERTING A GOOD HORSE INTO A POOR ONE.

4620 Paul Street, FRANKFORD, PHILADELPHIA, PA., Jan. 8, 1880.

B. J. KENDALL & Co.—Gentlemen: I had a horse in my stables that I drove from 1872 until April, 1878. During all that time he suffered more or less from a bone spavin, which in 1878 was at least of nineteen years standing, for the spavin was on his leg when we bought the horse in 1860, he being then seven years old, and the man who sold us the horse declared that the horse was foaled with that enlargement on his hock. I used various sweating and blistering liniments, and in 1865 we engaged a veterinary surgeon who *applied the actual cautery*; but all these failed to give permanent relief. But finally I obtained a bottle of "Kendall's Spavin Cure," which I applied at once according to directions, and the patient old sufferer found instant relief. I have used "Kendall's Spavin Cure" for spavins, ring-bones, splints, etc., with entire satisfaction, ever since. It certainly is one of the most useful and beneficial discoveries of the age. Yours truly,

THEODORE F. WEISS.

Office of Van Schaack, Stevenson & Co., Wholesale Druggists,
92 and 94 Lake Street, CHICAGO, ILL., Jan. 1, 1880.

B. J. KENDALL & Co.—Gentlemen: "Kendall's Spavin Cure" is having an unprecedented sale in this market for the length of time it has been introduced. All who use it give it an unqualified indorsement as the greatest horse liniment of the age. We enclose you a testimonial from Hanchett & Carter, proprietors of the great 12th street livery stable, of this city, who are enthusiastic in its praise.

CHICAGO, ILL., Dec. 15, 1879.

VAN SCHAACK, STEVENSON & Co.—Gents: It is several years since we first bought "Kendall's Spavin Cure" of you, and we do not hesitate to say it is the *very best* article for spavin, ring-bones, scratches, splints, etc., that we have ever used. We would not be without it in our large livery for thousands of dollars, as we use it constantly, with a success that we did not anticipate. Every one who has used it around here speaks of its wonderful cures in the highest terms. Having used every known remedy which has been placed before the public, we do not hesitate to pronounce "Kendall's Spavin Cure" one of the greatest discoveries of the age, and something that no horse owner should be without. It stands without a peer in horse liniments. Respectfully yours,

HANCHETT & CARTER.
Proprietors of 12th Street Livery, Chicago, Ill.

This is only a specimen of what we might give you. Yours, etc.,
VAN SCHAACK, STEVENSON & CO.

It has long been the opinion of eminent scientists, who have made the realm of nature the study of a lifetime, that the horse is our noblest domestic animal, perfect in structure, beautiful in appearance, and exhibiting a large amount of intelligence, and whose physical nature closely resembles that of the human family, thus showing that the causes and effects of diseases may be quite similar to diseases in the human subject; therefore we would naturally infer that any remedy which is good for either man or beast would be equally as good for one as the other under similar circumstances.

Knowing this to be the case, and after hearing repeatedly from parties who had used "Kendall's Spavin Cure" with the most gratifying results, for lameness or deep-seated pains on their own persons, we began to use it ourselves on human flesh, and after using it for the past two years or more for bruises, cuts, corns, frost-bites, burns, sprains, rheumatism or any lameness, and using on children from one or two years of age to men of mature years without ever seeing the slightest injury from using it *full strength*, but seeing always the most marked and beneficial results, we now recommend it, with the most perfect confidence, as the best liniment ever placed before the public for any lameness or deep-seated pain in man. Especially would we recommend it for bad cases of long standing. We care not if every other known remedy has been tried and failed to benefit in the least; for in every case of this kind where Kendall's Spavin Cure has been (to our knowledge) applied two or three times a day, for two or three weeks, a cure has been the result.

It does not take immediate effect, and sometimes there will be scarcely any perceptible effect for one or two weeks; but while it may be slow in its effects in these cases, it always proves to be sure to cure if followed up according to directions.

In using it for any difficulty of long standing, it should be applied for a long time, as such difficulties can not be removed in a short time. It can be applied with a feather, with a small swab, or with the hand, and by applying two or three times a day for several days, it will usually cause the skin to be a little sore on man, and we recommend that for all long standing difficulties it be applied after it becomes some sore just the same as before, until the disease is removed. Only a little is necessary at each application.

Read testimonials on next page showing its wonderful effects on human flesh.

READ OF ITS EFFECTS ON HUMAN FLESH!

ALBANY, N. Y., Sept. 25, 1880.

B. J. KENDALL & Co.—Sirs: Enclosed find twenty-five cents for your recently published Horse book—the revised edition. I have used your Spavin Cure, in bad cases, with very fine results, and I would not be without it for four times the amount per bottle. It is equally as good for man as for beast. I fell from a high tree about four years ago, and have complained of my back ever since, until about two months ago I began using Kendall's Spavin Cure, and have not been able to complain since. My doctor says that he had expected me to be a cripple for life, as he could not do anything for my spine. Please send the book to

CHARLES L. OOTHOUT,
Toll Gate, Troy Road, Albany, N. Y.

GRAVESEND, L. I., Jan., 1881.

MESSRS. KENDALL & Co.—I wish to add my testimony in favor of your invaluable Kendall's Spavin Cure. I am in the employ of the Prospect Park and Coney Island Railroad, and froze my ears very badly this winter. I suffered intense pain until Mr. Dunley applied your liniment to them. It gave me almost instant relief, and by applying it twice a day for one week it restored the ear to its original size, and I have had no trouble with it since. I feel very grateful to you, and would recommend Kendall's Spavin Cure to all for frost bites.

Yours truly,
JOHN DERBY.

READ BELOW OF ITS WONDERFUL EFFECTS AS A LINIMENT FOR THE HUMAN FAMILY.

HEMATITE, Mo., Aug. 20, 1880.

B. J. KENDALL & Co.—Gents: I am so overjoyed in view of the result of an application of your Kendall's Spavin Cure that I feel that I ought for humanity's sake to publish it to the world. About thirty-five years ago, while riding a young, ugly horse. I was injured in one of my testicles, and from that time to three weeks ago a slow but constant enlargement has been the result; giving me a great amount of trouble; almost entirely preventing me from horseback riding, which was my usual way of traveling. I saw a notice of your Kendall's Spavin Cure, and never once thought of it for anything except for horses, but after receiving the medicine and reading over what it was good for, feeling terribly exercised about my difficulty, for I had consulted many physicians and none gave me any specific but when it could be endured no longer to remove it with the knife. I applied your Kendall's Spavin Cure as an experiment, and it was so painful in its application that I concluded not to repeat it and thought no more about it until near a week, when, lo and behold! one-half of the size was gone. With joy I could hardly believe it; I immediately applied it again, and have made in all about one-half dozen applications running over a space of two weeks, and the terrible enlargement is almost entirely gone; in view of which I can not express my feelings of delight. It has been a God-send to me; may he send to others with like troubles.

JOHN RICE,
Pastor of Hematite Congregational Church.

P. S.—You are at liberty to put this in any shape you may please. I am not ashamed to have my name under, over or by the side of it.

SAVANNAH, GA., Dec. 23, 1880.

DR. B. J. KENDALL & Co.—Gents: Enclosed please find twenty-five cents for which send me one of your new Horse books, and oblige. I have tried your Kendall's Spavin Cure in a case of rheumatic gout and find it an excellent remedy. Yours, etc.,

J. W. HUNT.

ON HUMAN FLESH.

WEST ENOSBURGH, VT., Feb. 15, 1881.

DR. B. J. KENDALL & Co.—Gents: Several months ago I injured my knee joint which caused an enlargement to grow the size of a large walnut, and caused me very severe pain for four or five weeks, when I began to use Kendall's Spavin Cure with the most satisfactory results. It has completely removed the enlargement and stopped the lameness and pain. I have long known it to be excellent for horses, but now I know it to be the best liniment for human flesh that I am acquainted with. Yours truly,

T. P. LAWRENCE.

KENDALL'S SPAVIN CURE.

The wonderful success which has been achieved with this remedy has encouraged the proprietors to refine it *expressly for the human flesh.*

No remedy has ever met with such unqualified success on all animals, which has led many hundreds to test its virtues on their own flesh. Thousands have found it to be sufficiently strong to penetrate and to have real virtue to cure the worst cases of rheumatism, neuralgia, corns, bunions, warts, frost-bites, felons, chilblains, burns, or any pain, bruise, cut or lameness which are not affected in the least by ordinary liniments. *It does not blister, but on the contrary removes soreness.* For horses and other animals we recommend our patrons to use that put up in light wrappers, retail price $1. For man, use that put up in red wrappers, retail price 50 cents. If desired, that put up for horses can be used on human flesh with perfect safety.

DIRECTIONS.—*Keep the bottle well corked.* Do not apply near the fire or any flame. *For rheumatism or neuralgia* apply to the affected part three or four times a day, and protect the part from the cold. Continue its use for several days, or weeks if necessary, until considerable irritation of the skin is produced, and in bad cases of long standing, continue to apply it for several days after the skin becomes irritated sufficiently to cause considerable smarting at each application.

For sprains, swellings, burns, bruises, frost-bites, chilblains, corns, felons, bunions, backache, headache, toothache, sore throat, or for any soreness of the chest, quinsy, lameness or pain caused by any mishap, we recommend to apply this liniment to the affected part two or three times a day, or oftener if necessary.

That put up for horses can be used on human flesh, if desired, with perfect safety.

BAKERSFIELD, VT., Dec. 23, 1879.

B. J. KENDALL & Co.—Gents: I wish to add my testimony in favor of your invaluable liniment, "Kendall's Spavin Cure." In the spring of 1862 I slipped on the ice and sprained my right limb at the knee joint. I was very lame, and, at times, suffered the most excruciating pain. I wore a bandage on it for over a year and tried most everything in my reach, but could find nothing that would give permanent relief. When I overworked it would pain me very much. In April, 1878, I began to think I should be a cripple for life; but, having some of "Kendall's Spavin Cure," thought I would try it. I used one-third of a bottle, and experienced relief at once. The pain left me and has not troubled me since. I feel very grateful to you, and would recommend "Kendall's Spavin Cure" to all who suffer with sprains or rheumatism.

Yours truly,
MRS. J. BOUTELL.

DUNHAM, P. Q., March 10, 1879.

DR. B. J. KENDALL—Dear Sir: About a year ago I fell in the road onto some ice and was badly hurt in the hip joint, which caused me much suffering. I tried various remedies but none gave relief until I tried your Kendall's Spavin Cure. I applied it, full strength, twice a day for about two weeks during last October, and it effected a perfect cure. I have since then been well and free from lameness. It is very valuable for man as well as for beast.

Yours truly,
CHESTER K. GREEN.

PATTEN'S MILLS, Washington Co., N. Y., Feb. 21, 1878.

B. J. KENDALL, M. D.—Dear Sir: The particular case on which I used your "Spavin Cure" was a malignant ankle sprain of sixteen months standing. I had tried many things but in vain. Your "Spavin Cure" put the foot to the ground again, and, for the first time since hurt, in a natural position. For a family liniment it excels anything we ever used.

Yours truly,
REV. M. P. BELL,
Pastor M. E. Church, Patten's Mills, N. Y.

Agents for Kendall's Spavin Cure.

We give below some of our agents, most of whom sell at wholesale. It is now sold by nearly all the retail druggists throughout the United States. If your dealer does not keep it, and will not get it for you, send direct to Dr. B. J. Kendall & Co., Enosburgh Falls, Vt., and they will send, on receipt of price, ($1 per bottle or six for $5), to any address, and they usually put in with every sample order of this kind a present worth about what the express will be, as near as they can calculate.

Albany, N. Y .....Woodward & Hill, 324 Broadway.
" " .....A. McClure & Co., 74 and 76 State street.
" " .....Douro H. Fonda & Co., 70 and 72 State street.
Ann Arbor, Mich....Emanuel Mann.
Atlanta, Ga.....Lamar, Rankin & Lamar.
Baltimore, Md.....Robt. Lawson & Co., 277 West Baltimore street.
" " .....Thomsen & Muth, 16 German street.
" " .....Wm. H. Brown & Bro., 25 South Sharp street.
" " .....Vogeler, Son & Co., 6 and 8 South Liberty street.
" " .....Canby, Gilpin & Co.
Bay City, Mich.....L. S. Coman, 107 Center street.
Bloomington, Ill....Wm. W. Marmon.
Boston, Mass.....French & Coffin, 100 Federal street.
" " ....Geo. C. Goodwin & Co., 38 Hanover street.
" " .....Weeks & Potter, 360 Washington street.
" " .....Carter, Harris & Hawley, 356 Washington street.
" " .....Rust Bros. & Bird, 43 Hanover street.
" " .....Gilman Bros., 307 Washington street.
" " .....Cutler Bros. & Co., 89 Broad street.
" " .....Smith, Doolittle & Smith, 26 Tremont street.
Buffalo, N. Y.....J. S. Lytle & Son, 20 Exchange street.
" " ... .Powell & Plimton, 222 and 224 Maine street.
Burlington, Iowa... Reynolds & Churchill, 317 North Main st eet.
" " ....C. P. Squires & Co., 112 Jefferson street.
Burlington, Vt.....Wells, Richardson & Co.
Cedar Rapids, Iowa..Geo. C. Haman.
Charleston, S. C.....Dowie & Moise.
Chicago, Ill..... .. Van Schaack, Stevenson & Co., 92 and 94 Lake street.
" " ..... Fuller & Fuller, 22 Market street.
" " .....P. Hayden & Co., 45 and 47 Lake street.
" " .....Lord, Stoutenburgh & Co., 74 Wabash avenue.
" " .....Morrison, Plummer & Co., 52 Lake street.
" " .....Tolman & King, 51 East Lake street.
" " .....H. A. Hurlbut & Co., 75 Randolph street.
Cincinnati, Ohio....R. Macready & Co., 60 Walnut street.
" " ....John D. Park & Sons, 177 Sycamore street.
" " ....J. J. Bantlin, 146 Main street.
" " ....Hale, Justis & Co., 99 Walnut street.
" " ....J. S. Burd-al & Co.
Cleveland, Ohio.... Strong, Cobb & Co., 114 Superior street.
" " ....Benton. Meyer & Co., 127 Water street.
" " ....Dr. F. S. Slosson, 223 Superior street.
Clinton, Iowa.....A. R. Olney.
Columbus, Ohio.....James W. Meek, 43 East Spring street.
" " .....Braun & Bruck.
Council Bluffs, Iowa.Harle, McKune & Co.
Davenport, Iowa....Haight & Sea s.
Denver, Col.....McCarthy & Osborne, 463 Holladay street.
" " .....Wm. Dingle.

Des Moines, Iowa...Mitchell, Bartlett & Crain, 211 Court avenue.
" " ...Ward, Sessions & Ward, 313 Court avenue.
Detroit, Mich.....Swift & Dodds, 51 Shelby street.
" " .....T. H. Hinchman & Sons.
" " .....Farrand, Williams & Co., 15 Larned street.
" " .....James E. Davis & Co., 63 Jefferson avenue.
Dubuque, Iowa.... .W. H. Torbert.
" " .....Junkermann & Haas, 776 Main street.
Elmira, N. Y.....Gerity & Morrill, 126 Lake street.
Fort Wayne, Ind....Meyer Bros. & Co.
Galena, Ill..... S. Crawford & Co., 131 Main street.
Grand Rapids, Mich..Shepard & Hazeltine, 109 Ottawa street.
Hartford, Conn.. ..Smith, Bourn & Co.
Indianapolis, Ind....Stewart & Barre, 38 and 48 East Washington street.
" " ....Browning & Sloan, 9 East Washington street.
" " ....A. Kiefer.
Kansas City, Mo.....Woodward, Faxon & Co., 511 Delaware street.
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" " .....T. H. Spence.
Lincoln, Neb.....Leighton & Brown.
Louisville, Ky.....R. A. Robinson & Co., 196 Main street.
" " .....J. W. Morrill & Co., 315 Main street.
" " ....Arthur, Peter & Co.
Lowell, Mass.....Crowell & Harrison, 139 Central street.
McGregor, Iowa.....Samuel J. Peterson.
Milwaukee, Wis.....Dohmen, Schmitt & Co.
" " .....Baumbach & Rosenthal, 456 Market square.
" " .....Grun and Button Company, 297 East Water street.
" " .....H. Bosworth & Son.
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New York City.....W. H. Schieffelin & Co., 170 William street.
" " .....C. M. Moseman & Bro., 128 Chambers street.
" " .....McKesson & Robbins, 91 Fulton street.
" " .....Fraser & Lee, 20 College place.
" " .....R. W. Robinson & Son, 284 Greenwich street.
" " .....Lazell, Marsh & Gardner, 10 Gold street.
" " .....Wm. G. Short, 52 Warren street.
" " .....Tarrent & Co., 280 Greenwich street.
" " .....David M. Stiger & Co.
" " .....Coffin, Ridington & Co., 72 John street.
" " .....Chas. N. Crittenton, 115 Fulton street,
" " .....Hall & Ruckle.
Norfolk, Va.....A. Wrenn & Son, 24 Union street.
Norwich, Conn.....Lee & Osgood, 146 Main street.
Omaha, Neb.....C. F. Goodman.
" " .....Kennard & Forsyth.
" " .....Kennard Bros. & Co.
Peoria, Ill.....Porte C. Wheeler.
" " .....Colburn, Birks & Co.
Philadelphia, Pa.....Johnston, Holloway & Co., 602 Arch street.
" " .....C. B. Day & Co., 38 North Third street.
" " .....French, Richards & Co., N. W. corner Tenth and Market streets.
" " .....Smith, Kline & Co., 311 North Third street.
" " .....Barker, Moore & Mien, 609 Market street.
" " .....W. M. Wilson & Co., 206 Market street.
" " .....W. D. Elliot & Co.
Pittsburgh, Pa.....Harris & Ewing, 341 Liberty street.
" " .....Campbell & Coffey, 279 Liberty street.
" " .....J. Henderson & Bro., 50 Seventh avenue.
" " .....Fahnestock, Irwin & Rott, 76 Wood street.
" " .....Geo. A. Kelly & Co., corner Wood street and First avenue.
Portland, Me.....W. F. Phillips & Co.
" " .....John W. Perkins & Co.
Portland, Oregon... Hodge, Davis & Co., 92 Front street.
Providence, R. I.....Wm. B. Blanding, 54 to 58 Weybosset street.
" " ....E. Allen & Co., 3 and 5 Fulton street.
" " ....D. W. C. Packard.
" " ....Geo. L. Claflin & Co., 62 South Maine street.

Quincy, Ill .....Sommer, Lynds & Co.
Rochester, N. Y. ...Jacob K. Post & Co.
" " .....C. F. Paine & Co.
" " .....E. H. Davis, 81 State street.
St. Joseph, Mo.....Samuel J. Smith & Co.
St. Louis, Mo.....Richardson & Co., 714 North Main street.
" " .....Haydens & Allen, 512 North Main street.
" " .....Meyer Bros. & Co., 10 North Second street.
" " .....A. A. Mellier, 709 Washington street.
" " .....Geo. K Hopkins & Co., 211 North Second street.
St. Paul, Minn.....Noyes Bros. & Cutler, 32 Robert street.
San Francisco, Cal...Crane & Brigham, 520 Market street.
" " ...Coffin, Redington & Co.
Scranton, Pa.....Geo. W. Fritz. 410 Lackawanna avenue.
Sioux City, Iowa....Hormick, Walls & Co., 50 Fourth street.
Springfield, Mass....J. T. Webber & Co.
Springfield, Ohio.....Dr. T. J. Casper, 41 East Main street.
Syracuse, N. Y.....C. W. Snow & Co.. 28 East Genesee street.
" " .....Kenyon, Potter & Co., 34 Clinton street.
" " .....Moore & Hubbard.
Terre Haute, Ind....Gulick & Berry.
Toledo, Ohio.....West & Truax.
" " .....Walding, Kinnan & Co., 166 Summit street.
Troy, N. Y..... ...John L. Thompson Sons & Co., 159 River street.
Utica, N. Y.....George Windherm.
" " .....John H. Shuhan, 155 Genesee street.
" " .....Comstock Bros.
Washington, D. C...Stott & Cromwell, 480 Pennsylvania avenue.
Wheeling, W. Va....Laughlin Bros. & Co., 1208 Main street.
Worcester, Mass....Geo. N. Newhall, 30 Exchange street.
Zanesville, Ohio.... Bailey & Porter.

IMPORTANT TO MERCHANTS AND HORSEMEN.

We would like a good agent to sell "Kendall's Spavin Cure" and this book, in every town in the United States. Apply to Dr. B. J. Kendall & Co., Enosburgh Falls, Vt., for terms.

We hope that none but reliable and responsible persons will make applications for the agency, and to all such we would say that we will print circulars for our agents with their card printed on them and send free by mail to any person who buys the Spavin Cure, either of us or of any of our wholesale agents, to sell again, if they will only write to us giving name and place written plain that we may know number wanted, etc.

We recommend all to send their orders to the nearest wholesale agent.

In sending orders direct to us it is best usually to send P. O. money order or check for the amount wanted, with full shipping directions, and the order will receive prompt attention, and by so doing you will save time and expense. To all who would investigate to know if we are responsible for any money which might be sent to us, we would refer to the following well known firms: Wells, Richardson & Co., Burlington, Vt.; Geo. C. Goodwin & Co., Boston, Mass.; Charles Pfizer & Co., New York City; and Rand, McNally & Co., Chicago, Ill.; or to any of the clergymen or officers in this town.

A FEW OF THE

MEDICINES USED FOR THE HORSE.

We once heard it remarked by an eminent professor of Materia Medica, that, if he was compelled to combat with disease with either opium alone or all of the remaining drugs in use without the opium, he would choose the opium alone.

Another professor has said, "Give me mercury, iodine, quinine and the lancet, and I will combat with disease." While I do not altogether endorse the views of either of these distinguished professors, either in the number or selection of medicines they would choose first in preference to all others, I would say, give me, as my first choice, aconite and iron, in connection with the opium, and a few others, and I should feel that I was fitted out with the most important drugs for the successful treatment of the diseases of the horse.

We will give something of a history of the more important drugs used for the treatment of the diseases of the horse, with their effects and uses.

Acids.—These nearly all have a sour taste, and are derived from the vegetable, mineral and animal kingdoms. The number of acids used in medicines is small; among the most important of these are acetic acid, muriatic acid, nitric acid, sulphuric acid, tannic acid, gallic acid, carbolic acid, arsenious acid, phosphoric acid and tartaric acid.

Acetic Acid.—When diluted with seven parts of water, it is about the strength of ordinary vinegar. It is produced from the purification of pyroligneous acid.

Use.—It is used by some, with good results, for sprains and bruises, and for the destruction of the poison of insects, by adding to six ounces of the acid one-fourth ounce tincture of opium and two ounces of camphor.

Muriatic Acid.—This acid is obtained by the action of sulphuric acid on common salt. When pure it is a transparent, colorless liquid, but the commercial acid has a yellowish color.

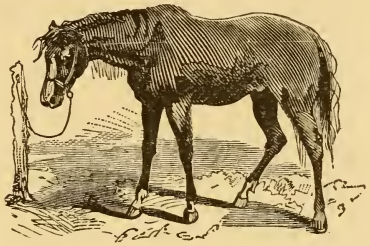
Muriatic acid is a good tonic in debilitating diseases of the horse, and is refrigerant and antiseptic.

Dose.—Half to one fluid drachm may be given, largely diluted with cold water, and repeated two to four times a day.

Externally, it may be used for sores in the feet, by pouring a few drops into the sores or nail holes. Eight or ten drops may be advantageously

used for poll-evil or quittor by being poured directly into the fistulous opening.

It may be used for various affections of the skin, by diluting with glycerine, and washing off in a short time if used strong.



Carbolic Acid.—This important medicine is obtained from coal tar oil. Its smell resembles that of creosote.

Uses.—It is used for various purposes, such as a disinfectant in stables where animals have distempers, fevers, etc., by washing the stalls, floors and ceilings with water which contains a small quantity of the acid; also used, with gratifying results, for unhealthy wounds and sores, by applying a solution of the following strength: Carbolic acid, one ounce; fresh soft water, six pints; this prevents putrefaction, and will cause the wound to be more healthy and to heal sooner. Carbolic acid is also used for destroying wood ticks, lice and all kinds of parasites, and is quite effective in preventing the bot fly from depositing her eggs when those parts which are commonly chosen by the bot fly are washed with a solution double the strength given above.

Nitric Acid, (called, also, Aqua Fortis).—This is also a valuable tonic, when properly given. It is extremely sour and corrosive, and should be guarded by the same caution as in giving the sulphuric acid.

Dose.—It may be given in doses of five to twenty-five drops, largely diluted with water.

Sulphuric Acid, (called, also, Oil of Vitriol).—This acid is obtained by burning sulphur, mixed with one-eighth of its weight of nitre, over a stratum of water contained in a chamber lined with sheet-lead.

Uses.—Many consider this acid to be preferable to any other of the acids for internal use, in debility of the digestive organs, for general weakness, and as a refrigerant.

Externally, it is used similarly to muriatic acid. When it is desired to use it as a caustic it should be mixed with dry powdered white vitriol, sufficient to make it of a pasty consistence, so it can be confined to the location which it is desired to cauterize.

This acid, as well as nitric or muriatic acid, is a powerful irritating poison when given into the stomach undiluted; and persons should bear in mind, when these acids are given, that they should be largely diluted with water and thoroughly mixed before administering.

A dose of sulphuric acid is about ten to forty drops, largely diluted with water.

Tannic Acid, (called, also, Tannin).—This is produced from nutgalls, oak bark, etc. It is uncrystallizable, white, or slightly yellowish, with a strongly astringent taste, inodorous, soluble in water, but not very soluble in alcohol or ether, and insoluble in most oils.

Tannic acid precipitates solutions of starch, albumen and gluten, and forms, with gelatine, an insoluble compound, which is the basis of leather.

Uses.—It is valuable, mixed with water, as a wash for running sores and ulcers, and is also excellent for diarrhœa, and may be given for any disease where this class of medicines is indicated. It will, in many cases of bleeding sores, stop the bleeding if applied locally. It is sometimes used as an eye-wash, with excellent success, by applying a solution of the following strength: tannic acid, one-fourth ounce; cold water, one quart. As it is harmless and safe to use, we would recommend it as an eye-wash.

Dose.—For diarrhœa, the dose should be from one-half to one drachm.

Aconite. (Wolfsbane—Monkshood).—An active poison, which grows abundantly in the forests of Germany, France and Switzerland. It is also cultivated in the gardens of Europe, and has been introduced into this country as an ornamental flower. All parts are poison. The leaves and roots are used. A tincture made from the root is much more active than from the leaves.

Tincture of Aconite Root.—This is one of the most powerful and successful sedatives which is in use. It is one of the best medicines we have for the successful treatment of several of the diseases of the horse, when properly used, and has, to a certant extent, done away with bleeding and physicking, the former of which has been, in the past, so indiscriminately and dangerously used. It is not only sedative, but it is an anodyne, diaphoretic and antiphlogistic. It controls fever, reduces inflammation and allays pain. In fact, we have no drug which will so well control the circulation and action of the heart as aconite.

Medical Uses.—The effects of remedial doses are felt in twenty or thirty minutes, and are at their height in an hour or two, and continue, with little abatement, from three to five hours. We have no single drug which is used with such gratifying results in many cases, such as lung fever, or, in fact, inflammation of any part of the body, colic from eating green food, and founder.

Caution.—In overdoses this valuable drug is an active poison, therefore we would caution all who use it about giving too large quantities, as prostration and perhaps death would be the result. Never give more than five or six doses, if twenty-five drops are given at each dose, nor more than seven or eight, if twenty drops are given at each dose. The dose may vary from ten to forty-five drops, but for most purposes should be about twenty-five drops.

ALOES are of several varieties—Cape, Barbadoes and Socotrine—and it is the condensed juice of the leaves of a plant. Given by some as a purgative or cathartic for horses; others consider it bad practice to use it much. A *dose* should, for ordinary purposes, be from one-half to one ounce. It is generally best to combine with it fenugreek, ginger or canella.

ANTIMONY exists in its natural state in France and Germany. The preparations of antimony which are used for the horse most, are, 1st, *Sulphuret of antimony*, also commonly called *black antimony*, This is by many considered a remarkable remedy for the horse, for many purposes, but especially to make the horse *shine*, and to have the appearance of being quite fat. 2d. *Tartrate of antimony and potassa*, commonly called *tartar emetic*, has been in great repute in the treatment of diseases of the chest; but is now considered of but little value in these diseases.

ANISE SEED are obtained from the anise plant, which is a native of Egypt, but has been introduced into the south of Europe and is cultivated in various parts of that country, and is cultivated occasionally in the gardens of this country.

Uses.—It is a grateful, aromatic carminative; and is supposed to have the property of increasing the secretion of milk. It is used for flatulent colic, indigestion, loss of appetite, etc. It is an excellent remedy when combined with other medicines, for various kinds of condition powders.

Dose.—One-half to two ounces, which may be repeated three times a day.

AQUA AMMONIA, (called, also, Hartshorn).—This medicine is very valuable both for internal and external use. It is a diffusible stimulant, antispasmodic and antacid. It is used *externally* with olive oil, and in various mixtures as a counter-irritant. Used as an antidote for bites of poisonous serpents. Given with good results for flatulent colic in *doses* of two to three drachms; given with milk as directed below for carbonate of ammonia.

CARBONATE OF AMMONIA.—This is a very valuable medicine for debility and prostration from lung fever, bronchitis, influenza, or any disease causing great weakness. Its effects are similar to those of aqua ammonia given above.

Dose.—One to three drachms, which may be repeated three times a day, and should be given in milk or cold gruel, which will protect the mucous membranes of the throat and stomach.

Arsenic.—This is an active poison in large doses, but when given in proper doses is an excellent tonic, improving the general condition of the horse. It should be given in a large bulk of cut feed, so as to protect the stomach. From two to five grains may be given in the twenty-four hours, and it should be continued for about two weeks, when the medicine should be stopped for one or two weeks, and then it may be given again as before. Some consider it a sure cure for the heaves.

Asafœtida.—A gum resin obtained from a plant of Persia by making incisions into the living root, collecting the juice which exudes, and drying it in the sun. It has a peculiar odor, similar to that of onions.

Uses.—It is antispasmodic, expectorant, and a moderate stimulant and laxative. It is given as a vermifuge and for loss of appetite, also used for heaves, in connection with camphor. (See Treatment of Heaves.)

Dose.—One to three drachms, and, if the stimulant effect is wanted, give from one to two ounces of the tincture.

Blue Vitriol.—This is an excellent medicine, when given internally, as a tonic, to build up the system. Given for glanders, farcy and various other diseases requiring tonic and alterative medicine, and should be combined with ginger, fenugreek or gentian. *Externally*, blue vitriol is used, with good results, as a caustic for proud flesh, by touching the parts with a piece of the crystal. It is also excellent for many wounds which have no proud flesh, by applying it in solution, six to twelve grains to each ounce of soft water.

Dose.—It may be given in doses of from one-half to one drachm, twice a day.

Camphor.—A peculiar concrete substance derived from a plant in China and Japan. It is recommended for nervous excitement and for heaves, and is used in many cough mixtures. It is a favorite household remedy, and used externally to a large extent.

Dose.—Camphor may be given in doses varying from one-half to two drachms. Camphor gum one ounce, and sweet oil eight ounces, mixed, make a very good external remedy for various purposes.

Cantharides. (Spanish Flies.)—This remedy is produced by collecting the beetles commonly called Spanish Flies. These insects are of a beautiful, shining, golden green color, and usually make their appearance upon the trees of Spain, Italy and the south of France in the months of May and June, when they are collected by placing linen cloths under the trees on which they have lodged through the night, and shaking the tree early in the morning, while they are torpid from the cold of the night, and consequently let go their hold easily. They are then deprived of life by the vapor from boiling vinegar, and dried in the sun or in rooms heated by stoves.

Uses.—Internally, cantharides are a powerful stimulant, with a peculiar direction to the urinary organs, and in moderate doses it sometimes acts as a diuretic. Used with good results for glanders and farcy. The principal use of the cantharides is as a blister, by mixing it with lard.

Dose.—Spanish flies may be given in doses varying from three to seven grains, but given only once a day.

Castor Oil.—This is the expressed oil of the seeds of the castor oil plant, which is now cultivated largely in this country throughout many of the Southern and Western States.

Use.—This oil is very useful and safe for common use in the human family; but it is considered unfit for the horse, as it sometimes causes inflammation of the coats of the bowels without relief from the purging. Raw linseed oil is considered as safe and efficient for the horse as castor oil is for man. (See Linseed Oil.)

Dose.—When it is thought best to give castor oil, or in the absence of the raw linseed oil, it may be given in doses varying from three-fourths of a pint to one and one-fourth pints.

Catechu.—An extract prepared from the wood of Acacia Catechu, and found most abundant in the East Indies. It is a small tree, seldom growing more than twelve feet in height, with the trunk about one foot in diameter.

Use.—An astringent which will bind the bowels in diarrhœa, and is combined, with good results, with opium and prepared chalk, for diarrhœa.

Dose.—One to three drachms.

Prepared Chalk. (Creta Præparata.)—This is the only form in which chalk is used in medicine, and is an excellent antacid; is one of the best antidotes for oxalic acid. It is used, with good results, for acidity of the stomach, and for diarrhœa, etc.

Dose.—One to two ounces.

Chamomile Flowers.—This is a native of Europe, and grows wild in all the temperate parts of that continent, and is also largely cultivated.

Use.—A very mild tonic, and quite useful when combined with other medicines of this class.

Dose.—It may be given in doses varying from one-half ounce to two ounces.

Charcoal.—This may be given, with good results, powdered, for chronic diarrhœa, dysentery and debilitated stomach.

Dose.—Half an ounce to one ounce, and it may be given suspended in gruel. It may be used, with good results, externally, when applied to badly smelling wounds.

Chloride of Lime.—This compound was originally prepared for a bleaching agent nearly a century ago, and has since been found to have valuable properties as a disinfectant. It is a dry, or but slightly moist,

grayish-white, pulverulent substance, with an odor similar to that of chlorine.

Uses.—Chloride of lime is a disinfectant, and, from its deodorizing and antiseptic properties, makes an excellent stimulant to unhealthy ulcers, applied in solution; also, for cutaneous eruptions, etc. Its principal use is as a disinfectant in stables occupied by glandered and other sickly horses, and it may be sprinkled on the floor every morning, or may be suspended in the stable in a box which has several holes cut into it.

Dose.—When it is thought best to give it internally, one to three drachms may be given at a dose, in water.

Chloroform is a colorless, volatile liquid, having a bland, ethereal odor and a sweetish taste.

Uses.—It is an excellent stimulant for horses, when having a chill from cold, or in congestion, and is sometimes given to quiet pain in colic and other painful diseases. It is used mostly in liniments and sometimes for inhalation. One ounce of chloroform and three ounces of olive oil, well mixed, make an excellent liniment for external use. When chloroform is given to the horse by inhalation he should be well secured, so as to prevent his doing any damage, as it sometimes makes him perfectly wild and uncontrollable. When any operation of any considerable extent is to be performed it is best to tie the horse down, and then administer the chloroform by pouring about an ounce of it on to a sponge, holding the sponge to one nostril, and covering the nose loosely with a large towel; but care should be taken to allow the horse pure air, also, to breathe with the fumes of the chloroform. Usually two to four ounces is sufficient to produce its effects when inhaled.

Dose.—One to two drachms, well diluted with weak spirits.

Croton Oil.—This is a very powerful cathartic, and dangerous, if improperly used, but, as a "last resort," oftentimes works very well.

Dose is usually from ten to fifteen drops.

Elecampane.—This is one of the best medicines in use for lung affections, and should enter largely into all mixtures for this class of diseases. It is also an agreeable aromatic, and should form a part of all condition powders.

Epsom Salts. (Sulphate of Magnesia.)—This medicine, so well known in every household, is used with good results as a febrifuge, and is often given as a purgative. It is not only cheap, but is very good for several diseases, and forms a part of various condition powders.

Dose.—One-fourth to one-half pound, dissolved in as large a quantity of cold water as can be given the horse conveniently, with one ounce of ginger; also, allowing the horse to drink, if he will, after the salts have been given, for the reason that they will be much more efficient if largely diluted.

Ergot.—This is produced from diseased rye, and is of great value in the foaling season, as it is the most effectual remedy known for increasing the action of the uterus, when there is not sufficient contraction. Great care should be taken when it is given that nothing prevents delivery, except deficient action of the uterus. It should not be used by the non-professional, as they would be more likely to do harm than good with it; in fact, the cases demanding its use are *very* rare, but, as we said before, where its use is really called for, nothing else will act as well.

Dose.—Of the powder, one-eighth to one-half ounce; of the tincture, one to two fluid ounces may be given.

Ether. (Sulphuric Ether.)—This is a very valuable remedy, and is used with excellent results for colic, and for various purposes is a good antispasmodic. Given with tincture of opium, it works admirably for colic.

Dose.—One to two fluid ounces.

Euphorbium.—This is the concrete, resinous juice of a plant growing in Africa and in some other parts of the world.

Use.—Owing to the severity of its action its internal use has been entirely abandoned, and it is now used only externally, and it is so severe that it is but very little used even in that way.

Male Fern.—The root of a plant growing in South Africa. It is said to be very valuable for ridding animals of worms.

Dose.—It may be given to the horse in doses of one-half to one pound of the powdered root, and may be followed with a purgative the next day.

Fenugreek.—An annual plant, growing spontaneously in Southern Europe. It has a peculiar odor, which is quite agreeable. The seeds, ground, is the portion used, and they enter largely into nearly all the condition powders which are put up and sold through the country.

Dose.—One-fourth to one ounce.

Nut Gall.—A morbid excrescence upon the oak tree, resulting from holes being made in the bark by an insect.

Uses.—It is a powerful astringent, and is used to bind the bowels when affected with diarrhœa or dysentery; used, also, for applying to the greasy heels of horses.

Dose.—One to three drachms.

Gentian.—A valuable tonic. It excites the appetite, invigorates digestion, moderately increases the temperature of the body and the force of the circulation, and may be combined with iron for debility; it is used, in connection with other drugs, for various purposes, and forms an *important* part of various condition powders.

Dose.—One-half to two drachms, repeated two or three times a day.

GINGER.—There are several varieties, of which the *Jamaica* or *white ginger* is the best, but all are used, with good results, for colic, loss of appetite, etc., and should enter into every dose of purgative medicine.

Dose.—From one to four drachms.

GLYCERINE.—This is the sweet principle of fats or oils, and was discovered nearly a century ago, when it was called the *sweet principle of oils.* It is a fluid which scarcely ever dries up, and is a thick, syrupy substance, resembling castor oil in its looks, but without smell, and very sweet to the taste.

Uses.—It is an excellent application to many sores, and is used with very gratifying results for scratches or sore heels; also, for skin diseases, when a softening and soothing application is required. When a little is added to poultices, it has the effect to keep them soft and moist for a long time. It is soluble in water.

IRON.—This is one of the most valuable medicines in use for many cases of debility, as it supplies the red corpuscles of the blood, which are generally deficient in a debilitated animal. Various preparations of iron are in use, of which the following are the most commonly used:

Copperas. (Sulphate of Iron.)—This is one of the cheapest, and, for many purposes, the best. It is tonic and astringent, and is used, with good results, for weakness, bad condition, swelling of the legs, body, sheath, etc.

Dose.—One-half to one and a half drachms, and it should be combined with the same quantity of gentian or ginger, and given in the feed, or as a drench with cold water.

Muriated Tincture of Iron.—This is an excellent preparation of iron, and may be given in doses varying from one-fourth to one ounce. Although several other preparations of iron are in use, the two given above are all that are ordinarily required.

JUNIPER BERRIES.—The best juniper berries come from the south of Europe, and are about the size of a pea, and more or less shriveled. They are produced from a small evergreen shrub, which sometimes grows twelve or fifteen feet high. It is used for loss of appetite, to stimulate the stomach and kidneys to action, and during convalescence from disease.

Dose.—One to two ounces.

KINO.—This is the inspissated juice of several plants which grow in Africa, East and West Indies, South America, etc. It is a powerful astringent, and is used in diarrhœa as a substitute for catechu, which is not quite as powerful.

Dose.—One to five drachms.

RAW LINSEED OIL.—This is, perhaps, the safest and best purgative in common use, and should be given by non-professional persons in preference to any other medicine. Never give boiled oil.

Dose.—One to two pints, as a purgative.

Liquorice Root.—This is the root of a small plant, growing four or five feet in height, and which is cultivated in England, the north of France, and Germany. It has an agreeable, sweetish taste.

Uses.—It is an excellent demulcent, and well adapted to cases of irritation of the mucous membranes of the lungs, bowels and urinary organs. It forms an important part of condition powders, and especially when given for coughs.

Dose.—From one-half to one ounce.

Mercurial Ointment.—This is used mostly for skin diseases, such as mange. But we prefer, for this disease, the treatment which we have already given in another place. Mercurial ointment is sometimes used with good results to rid animals of lice, by boring a small hole where the animal is liable to rub its neck, and filling it with mercurial ointment.

Nitre. (Saltpetre.)—This medicine has long been used as a febrifuge and as a diuretic, and is still held in high esteem by many, but there are other drugs which are better adapted to the treatment of the various diseases for which it has long been used.

Use.—As a febrifuge in fevers and inflammations, and for kidney complaints; it is also used, by many, in condition powders, for scratches and various disorders of the blood.

Dose.—One and one-half to three drachms.

Nux Vomica.—This is an active poison in large doses, but if given in proper quantities it is an excellent tonic and nervine for the horse when suffering from depression, dyspepsia, etc.

Use.—In paralysis and also in "glass eye" depending upon a want of nervous energy in the optic nerve of the horse.

Dose.—The tincture is generally used, of which one to three drachms may be given two or three times a day.

Oil of Tar.—This is procured by the distillation of tar, and is an excellent remedy for any cough, heaves, etc. (See Treatment of Heaves.) It is also an excellent application externally, when mixed with equal parts of castor oil or sweet oil, to promote the growth of the hoof of the horse. This mixture makes an excellent hoof ointment. To darken the color, lamp-black may be mixed in sufficient quantity to suit the color of the foot.

Dose.—Oil of tar may be given internally in doses of from one-half drachm to two drachms.

Oil of Turpentine, (commonly called Spirits or Spirit of Turpentine.)—This is so common and well known that it will not need any description here.

Uses.—It is stimulant, diuretic, anthelmintic, diaphoretic, and externally rubefacient. It is given largely in several diseases of the horse, such as colic, for various lung difficulties, and for the expulsion of worms. As an external remedy, combined with an equal quantity of sweet oil, or in

various mixtures, it is used with good results, but should not be applied in full strength to the horse.

Dose.—The dose of spirits of turpentine is from one to two ounces, and should *always* be mixed with twice its bulk of sweet oil.

Opium.—This is the dried juice of the poppy, and is brought to this country from Turkey (which is probably the best), and also from several other countries. It is certainly one of the most valuable drugs in use, but should not be used indiscriminately. It relieves pain, and is used with great success for colic and various other diseases.

Dose.—One-half to one and a half drachms.

Oxide of Zinc.—This is an inodorous, tasteless, yellowish-white powder, and insoluble in water and in alcohol.

Uses.—Given internally, it is tonic and antispasmodic. Its principal use is external, applied to excoriated surfaces, by sprinkling the powder on the affected part, or, in the form of an ointment, by mixing one drachm oxide of zinc and one ounce of lard. It is used with good results for scratches, grease heels, and other sores which have a discharge of a thin fluid. Another good ointment may be made by adding oxide of zinc to a mixture of shaved castile soap, moistened with a little water and all thoroughly mixed together. The last mixture is an excellent preparation for scratches and grease heels on horses which are kept at work, as it can be easily scraped off at night, so that the surface may be cleansed before another application is made for the night. It allays irritation and is quite soothing to the parts.

Dose.—Internally, it is given in doses of from one-half to one drachm.

Red Iodide of Mercury, (called, also, Biniodide of Mercury).—This is a powerful irritant poison, when taken internally, and is now used only as an external remedy. It is a scarlet-red powder, which, like other preparations of mercury, is very heavy for its bulk; not soluble in water, and only slightly so in alcohol. It is held in great repute by veterinary surgeons for swellings of the glands of the neck, tumors and unnatural growths of all kinds. It is used principally with Cantharides, mixed with lard, which forms an excellent blister for various purposes. It is not generally used where it is desired to blister a large surface, as it produces considerable pain.

Rosin, or Resin.—This is the residue left from the distillation of turpentine, and is used by horsemen quite freely, and oftentimes is the cause of much mischief, as it is used, to a considerable extent, to cause the horse to urinate more freely, and the overdoses, so frequently given, are often the cause of various diseases of the kidneys and loins. The oftener rosin is given the horse, the more he stands in need of it, in the eyes of the driver. The kidneys become overworked, he desires to urinate more frequently, and less urine is voided at each time. The mischief is not seen, and the owner

hastens to give more rosin, thinking to remedy the defect that he has been instrumental in producing. It should be remembered that powerful diuretics, like powerful purgatives, tend only to weaken and to debilitate. If there be a urinary defect, find out the cause, and, if possible, have it removed, and the effect will cease; but do not attempt to do so by force, against all science and common sense.

Sweet Spirits of Nitre.—This is generally considered a good household remedy for fevers, etc. It is used for the horse to increase the action of the kidneys, but should not be given too freely in all cases of supposed inaction of the kidneys.

Dose.—One to two ounces, given with a little cold water.

Sulphur.—Is a valuable medicine, given internally, for rheumatism, in doses of one-half to two ounces, and also for various disorders. It is also used, with grand success, for skin diseases.

Tar.—The tar used in this country is prepared mostly from a species of pine growing in the Southern States. Tar consists of resinous matter, united with the acetic acid, oil of turpentine and various volatile empyreumatic products, and colored with charcoal.

Uses.—The medical properties of tar are similar to those of the turpentines. It is used occasionally, with good results, for complaints of the urinary passages, and also for coughs. Externally, it is used for foul and indolent sores; it is also an excellent application to the bottom of the foot, to soften the hoof when it is too hard and the foot sore. Some prefer a mixture of glycerine and tar, mixed as follows: Take of tar and glycerine, each, six troy ounces, and of starch, in powder, two drachms. Mix the starch thoroughly with the glycerine, previously warmed; then add the tar, and heat quickly to 212°. Strain, if necessary, and stir the mixture while cooling. Tar should be kept in every horse-shoeing shop for putting on the foot, usually with cotton batting or oakum, and having leather nailed on with the shoe.

Dose.—One to two ounces, repeated two or three times a day.

White Vitriol. (Sulphate of Zinc.)—This preparation of zinc is a valuable medicine, also, for healing sores and wounds. It is used, with good results, for healing fresh cuts and wounds, or ulcers, whether they be healthy or unhealthy, by applying a solution of the following strength, viz.: white vitriol, one ounce; soft water, one quart. It is also used, with very good results, in eye waters, and, perhaps, is one of the very best of medicines we have for the eye. As we have given two or three receipts for eye waters, with the miscellaneous receipts, we refer all who are interested to those.

Dose.—When given as a tonic, ten to fifteen grains may be given, dissolved in water. It is used, with good results, for irritated stomach, loss of appetite, etc.

B. J. Kendall & Co.'s New Laboratory.

It is with pleasure that B. J. KENDALL & Co. can now call the attention of their many friends and the general public to their New Laboratory, of which the cut on the last page of the cover of this book is a good representation. A few words of explanation may be of interest. The main building is entirely new, having been erected the past season. It is three stories in height, with basement under the whole building. The location is delightful, being on a rise of ground which gives a commanding view of the whole town, and from the tower the valley of the Missisquoi river can be seen for many miles, and with the Green Mountains in the background, and the valley at your feet, combines to make as rich a landscape view as can be had in this country. The far-famed Mount Mansfield, which is snow-capped nearly three-fourths of the year, can be distinctly seen in the distance with the naked eye. The buildings and the surroundings by many are pronounced the finest of the kind in the country.

The main building is divided into different departments. The basement has two furnaces for heating the whole building, and a large steam engine which furnishes power for the printing presses, elevator, etc.; also, most of the packing is done here.

First floor contains the offices of the Company, drug, manufacturing, bottling, corking and stamping rooms. Second floor consists of two large rooms, one devoted entirely to the advertising department, and the other, a large room used entirely for printing purposes, in which there are several presses in constant operation, supplying the great demand for advertising matter. The third floor is used wholly for storage for bottles, printing paper, etc., etc.

With these increased facilities the Company find that even now they have hardly room enough to meet the great demand made upon them, and at an early day they contemplate making extensive additions.

The great success which has attended the introduction of

KENDALL'S SPAVIN CURE,

In all parts of the United States, has never been equaled, and it is now considered by the best Veterinary Surgeons and most extensive horse owners in the country, to be the greatest discovery in the Veterinary science of the Ninteenth Century. It is giving the very best satisfaction wherever used.

A FEW REASONS WHY!

1st. *It does not blister or cause any sore, which makes it a desirable liniment for man as well as for beast.*

2d. *It is sure in its effect.*

3d. *As a household liniment it has no equal. Its effects on human flesh are marvelous. In cases of rheumatism, any deep seated pain, strain, sprain, or any lameness, it has no equal.*

4th. *It cures spavins, splints, ring-bone, curb, sprains, swellings, and all kinds of lameness.*

For further information, address

DR. B. J. KENDALL & CO.,

Enosburgh Falls, Vermont.

CONTENTS.

Abdominal Dropsy 3
Abscess of the Brain..... 3
Abscess of the Lungs..... 27
Age of the Horse..... 43
Atrophy..... 37
Baldness..... 32
Blood Spavin..... 36
Bog Spavin..... 35
Bone Spavin 33, 63
Bots 3
Breeding 44
Bronchitis 6
Burns and Scalds..... 6
Callus..... 7
Capped Elbow..... 7
Capped Hock..... 7
Capped Knee 7
Cautery 8
Chronic Bronchitis..... 6
Chronic Founder..... 16
Chronic Rheumatism..... 28
Colic..... 8
Corns 10
Curb 10
Debility..... 11
Deformities in Young Colts..... 12
Diarrhœa..... 12
Distemper 13
Doses for the Horse..... 41, 42
Dysentery, Acute..... 12
Epizoötic 13
Experience with Bone Spavin.... 63
Farcy 13
Firing 8, 14
Firing Horses..... 14
Flatulent Colic..... 9
Foot Diseases 14
Founder..... 15
Fracture 16
Frost Bites..... 18
Glanders 18
Gravel 24
Grease Heels..... 19
Heaves 19
Hide-Bound 20
Hints on Food..... 20
Hip-Joint Lameness..... 21
Inflammation of Bladder 24
Inflammation of Bowels 5
Inflammation of Kidneys 24
Inflammation of Stomach..... 22
Influenza 23
Interfering..... 23
Kendall's Spavin Cure..... 59
Kendall's Spavin Cure, Agents for 75
Kidneys, Disease of 23
Lameness 25
Laminitis..... 15
Lampers 25
Lumbrici 40
Lungs, Diseases of..... 25
Lung Fever..... 25
Mange..... 32
Medicines used for the Horse.... 78
Nasal Gleet..... 27
Navicular Disease..... 27
Occult Spavin 35
Pin Worms..... 40
Pleurisy 27
Pneumonia 25
Poll Evil 27
Proud Flesh. 27
Quittor..... 27
Receipts, Miscellaneous..... 50
Rheumatism 28
Ring-Bone 29
Saddle Galls..... 30
Scratches..... 30
Shoe Boil 7
Shoeing 46
Shoulder Lameness..... 30
Shoulder-Joint Lameness 31
Side Bones..... 31
Skin Diseases 31
Sores..... 32
Spavin..... 33, 59, 61
Splint..... 36
Sprain 36
Staggers..... 36
Stifle-Joint Lameness..... 37
Strangles 13
Sweeney..... 37
Table of Doses..... 41, 42
Tenia 39
Tape Worm 39
Testimonials..... 65
Thoroughpin 38
To Horse Owners 61
Tumors..... 38
Water Farcy..... , 38
Wind Galls..... 39
Windy Colic..... 9
Worms..... 39
Yellow Waters..... 40

IMPORTANT TO HORSEMEN.

A statement made in 1875, and also one below, from the same man, in 1879. Read them both:

BERKSHIRE, VT., August 30, 1875.

B. J. KENDALL—*Dear Sir:* I have found Kendall's Spavin Cure to be of such incalculable value in curing Spavins on horses, that I am free to assist in the spreading of its reputation by recommending it in this public manner. I had a valuable horse, which in some way had a bone spavin come on him, and the bunch grew until it was the size of one-half of a hen's egg. I never had heard of your Spavin Cure at this time, but I procured various other medicines, which were said to be sure cures, all of which I gave a thorough trial, but none seemed to reach the case at all. I finally got a bottle of your Spavin Cure, and used it as directed, (only applying over a space the size of the bunch each time), but, as it did not blister the horse, I thought it would not cure him, although I continued to put it on, and, after awhile, turned the horse out to pasture, and then only applied it about every other day. In a short time a large crust or scab peeled off which had seemed to work out from the bunch, and then I could see that the bunch was almost entirely removed. I used the remainder of the bottle, and my horse was entirely cured. It has removed the bunch entirely, and now no person can tell any difference in his hind legs.

I consider it the most wonderful medicine for Spavins that I have ever known of being used, for the reason that it CURES, and without blistering or causing any pain, when it is applied; it removes the bunch entirely, which I never have known being done by any other remedy, and does not disturb the natural growth of hair or leave any callus, but in a short time after it has been left off no person could tell that any medicine had been applied.

Hoping that this will be the means of benefiting others, as it has me, I remain, Yours, truly, R. A. GAINES.

HORSEMEN SHOULD READ THE FOLLOWING STATEMENT, MADE UNDER OATH.

TO WHOM IT MAY CONCERN: In the year 1875 I treated with Kendall's Spavin Cure a bone spavin of several months' growth, nearly half as large as a hen's egg, and completely stopped the lameness and removed the enlargement, so far as I can see. I have worked the horse ever since, very hard, and he never has been lame, nor could I ever see any difference in the size of the hock joints since I treated him with Kendall's Spavin Cure.

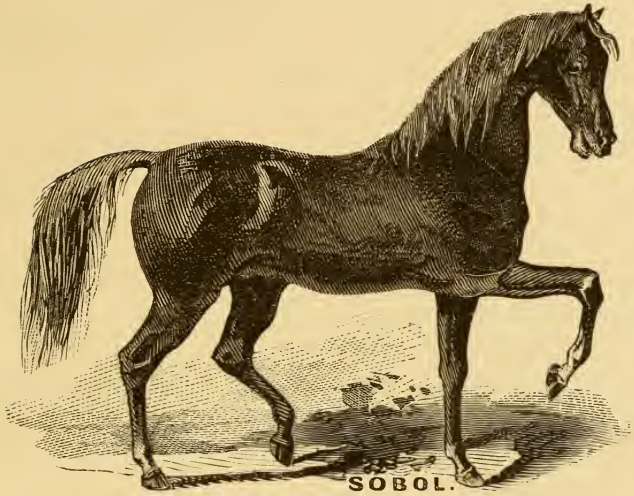
Enosburgh Falls, Vt., Feb. 25, 1879. R. A. GAINES.

Sworn and subscribed to before me, this 25th day of February, A. D. 1879. JOHN G. JENNE, Justice of the Peace.

Kendall's Spavin Cure can now be had at nearly every Drug Store, but if at any time you can not get it of your druggist or other merchants, send direct to us, as directed on page 75 of this book. Also consult pages from 61 to 78, which will be for your advantage, if you are interested in the horse.

MR. BATTELL'S IMPORTED ORLOFF,

"SOBOL."



This fine Connecticut horse, owned in Norfolk, was lately imported by his owner to supply the demand for a park or phaeton horse that should possess the requisites of size, beauty of form, stylish action, power and endurance. He is 15¾ hands high, black, with three white feet, rather light mane, and a tail of fair proportions. He is a Russian horse, foaled in 1870, and came from the stud of a Russian Count. His movement in a carriage is easy, graceful, without the least chafing or friction, and he can be easily driven by a lady. But the power and endurance that lie dormant under ordinary usage are brought out to surprise the beholder, if the horse is allowed the stimulus of a short trial of speed. Sobol is represented as appropriate in the easy movement suited to the carriage, where his stepping shows him to advantage.

PROF. FLINT'S

Horse and Cattle Renovating Powders

HAVE NO EQUAL TO OUR KNOWLEDGE FOR

PLACING A HORSE IN GOOD CONDITION.

THEY ARE PUT UP IN LARGE PACKAGES, AND CAN BE SENT BY MAIL TO ANY ADDRESS ON RECEIPT OF 75 CENTS.

Address B. J. KENDALL & CO.,

ENOSBURGH FALLS, VT.

WE WANT AGENTS

To Sell this Book in Every Town in the United States and Canada.

It is giving the very best of satisfaction everywhere, as is evident from the hundreds of letters received by the publishers, speaking of it in the highest of terms, a sample of which we give below.

The Editor of the "WESTERN SPORTSMAN AND LIVE STOCK NEWS," under date of Jan. 4, 1879, says of it: "It is a book that every owner of a horse should have, and no breeder of horses can afford to do without. It has thirty-five engravings illustrating positions assumed by sick horses, and gives treatment of diseases in such plain and comprehensive language as to be readily understood by any one of ordinary intelligence. We would not exchange it for any book on the horse and his diseases that we have ever seen, and we have read some books of the kind that cost ten dollars. It contains a large number of receipts, any one of which is worth double the price of the work."

DR. WM. H. HALL, Canandaigua, N. Y., under date of Dec. 3, 1878, says of it: "I have bought books from England that I paid five and ten dollars for, which I do not like as well as I do yours. It is different from anything I ever saw."

ELIJAH W. STEARNS, of Bedford, Mass., in a letter of recent date, says of it: "I have examined it with care. There are two wonders respecting it: first, that any book, however voluminous, containing so much practical common sense matter, of sterling value, could be written; second, that it could be condensed into so small compass. The book is ALL GOLD, NO DROSS. By the aid of it any person of ordinary intelligence can doctor his own horse."

Printed in English, German and French.

FOR TERMS TO AGENTS, Address,

DR. B. J. KENDALL & CO.,
ENOSBURGH FALLS, VT.

IT WILL REMOVE THE ENLARGEMENT.

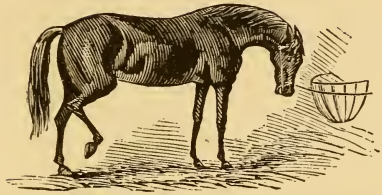
KENDALL'S

SPAVIN CURE.

Used with excellent results on beast or man.
It does not blister nor make any sore.

SOLD BY DRUGGISTS EVERYWHERE.

PROF. FLINT'S HORSE AND CATTLE RENOVATING POWDERS.



Having thoroughly tested the virtues of the above named powders and found them to be the most remarkable and valuable powders we have ever known to be used for horses or cattle, we have completed arrangements whereby we are enabled to furnish these powders to our patrons throughout the United States, having secured the SOLE AGENCY for the United States and Canada.

AS A BLOOD PURIFIER these powders have *no equal* to our knowledge for any disease or bad condition caused by impure blood. Every man knows, or should know, that thousands of horses are sick or in BAD CONDITION, as their owners say, simply because their blood is impure, which is caused by the horse being kept in a barn where the atmosphere is foul, or by being fed on improper food. We have no hesitancy in saying that PROF. FLINT'S RENOVATING POWDERS are the *very best remedy known* (in our opinion) for any ill condition or sickness caused by impure blood, which may be known by the horse looking poor, being dull, coat being rough and not looking thrifty, hide bound, legs swelling, etc. We never knew it to fail, (in any case of ill condition as described above, after one or two pounds had been given to a horse according to directions), but what the horse would fat up in a very short time, and act entirely different, really making him a new horse.

FOR COUGHS. We have always found it a perfect cure for every kind of a cough, whether of short duration or of long standing; if given until one to three pounds had been used for cases of long standing. Also, a perfect cure for epizoötic.

HEAVES. We never have had occasion to use any remedy for this disease ourselves, but several parties have reported to us that they have cured cases of heaves with PROF. FLINT'S RENOVATING POWDERS, and we believe them to be excellent for this disease.

We can send these powders by *mail, postage prepaid, for* 50 *cts.*, for a large package weighing about one pound, or five packages for $2.25. Address all orders to

DR. B. J. KENDALL CO.,
Enosburgh Falls, Vermont.

KENDALL'S BLISTER.

We wish to have it understood that "KENDALL'S BLISTER" is entirely different from "Kendall's Spavin Cure," as the latter does not blister.

"Kendall's Blister" is an excellent remedy for spavins, (especially blood or bog spavins), ring-bone, splint, or any similar difficulty. In all bad cases of long standing we think they can be more successfully treated by the use of "KENDALL'S BLISTER," in connection with "KENDALL'S SPAVIN CURE," (as directed on labels,) than by any other remedies in use, as many cases which will not yield to any other remedies, or to either of these alone, will soon yield to the use of our Blister, followed up by the use of our SPAVIN CURE, as directed.

Besides our Blister being a complete remedy when used with the Spavin Cure, we think it is well adapted to all cases where any blister would be applicable.

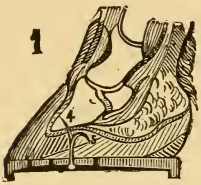
This Blister is not like many, so powerful as to destroy the skin and other tissues, yet it is very effective, and we believe the very best preparation, of its kind, which is now in use.

Although this Blister was first designed to be used with the Spavin Cure, we have learned that it works admirably alone, in many cases, and where parties live at a distance, and can not find the Spavin Cure at their stores, they can easily obtain our Blister by forwarding us the price, ($1.00), and we will send, by return mail, to any address.

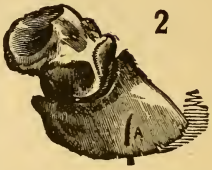
Our BLISTER is put up in tin boxes and can be sent by mail with perfect safety to any part of the world.

DR. B. J. KENDALL CO., Enosburgh Falls, Vermont.

LOOK WELL TO YOUR HORSE'S FEET.

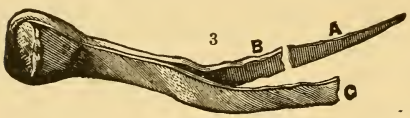


These drawings show how many horses are made lame and permanently injured by the use of the COLD-CUT and SHEARED POINTED nails. This process of manufacture produces lamination, causing the iron to form in layers, and when driven into the foot the horny fibres of which the hoof is composed cause the nail to separate at the point, and one portion passes into the foot.



No. 4 represents one of these nails, which was driven into the hoof, and SLIVERED in driving, one THIN blade passing into the quick or sensitive sole. No. 5, the THICK blade of the nail, passed out of the wall of the hoof for clinching. After a few days the horse was returned lame, and, upon removal of the shoe, a nail similar to the above was broken off, leaving a sliver in the foot. LOCKJAW ensued, from which the horse died. Upon dissecting the foot, a portion of the nail was found to have penetrated through the coffin bone, as seen in Fig. 2, letter A, thus sacrificing the life of a valuable animal.

As the remedy lies with the owner of the horse, it is for him to prohibit any cold-rolled or sheared nails being used in his horse's feet. The only Hot-forged and Hammer-pointed Horse-Shoe Nail in the World that is NOT CUT, CLIPPED NOR SHEARED upon the point, and will not split in driving, is the PUTNAM NAIL. See that your horse is shod with this nail, and avoid all risks.



This drawing was made from the nail taken from the hoof and coffin bone, as shown in Figs. 1 and 2.

This drawing was made from a nail, showing the lamination of iron in the COLD-ROLLED AND SHEARING process.

Every Putnam Nail is drawn down to a point from the rod, thus:

The illustrations of the Putnam Nails are very interesting, as showing the superiority of the nails made by the hot-forged process. The slivering of inferior nails, we are assured, is not overdrawn, and what instruments of torture such jagged iron must be to the sensitive foot of the horse can be imagined. The recommendations of these Nails, signed by W. H. H. Murray, Robert Bonner and Budd Doble, speak for themselves, and could be indefinitely reduplicated.—*The Spirit of the Times, New York, November 8, 1879.*

We address these lines to HORSE OWNERS, because they are the parties most vitally interested. We feel assured that, after knowing the facts, and giving the subject due consideration, they will, in company with such gentlemen as Messrs. BONNER, MURRAY, CHAS. S. GREEN, BUDD DOBLE, JAS. G. BREEZE, and many other CELEBRATED JUDGES OF HORSES, INSIST that their horses must be shod with the Putnam Hot-forged and Hammer-pointed Nail. A few months' trial will always convince.

P. O. Address,
Neponset, Mass.

THE PUTNAM NAIL COMPANY,
BOSTON.

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